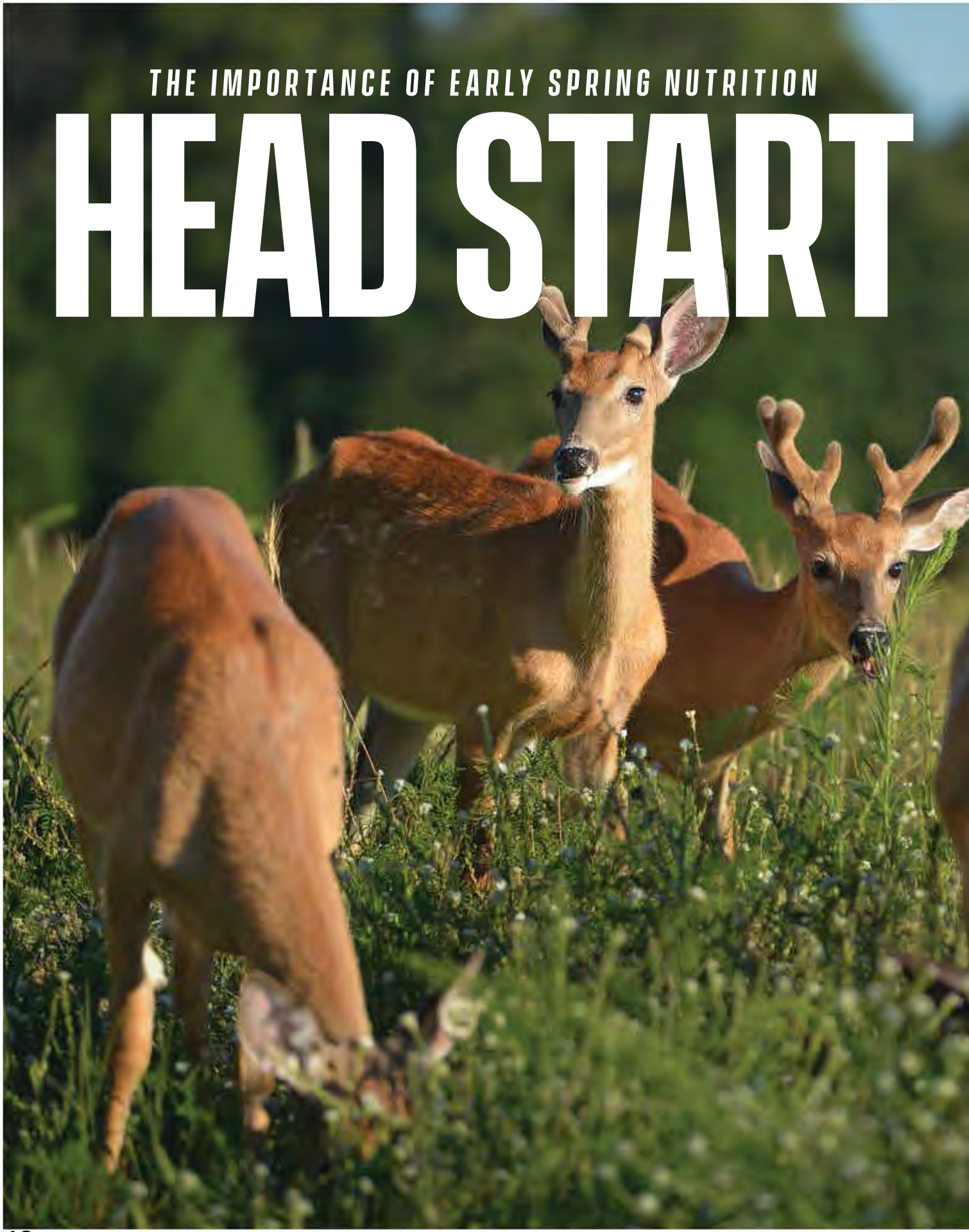
THE IMPORTANCE OF EARLY SPRING NUTRITION

HEAD START



You can't control what nature might bring. That's why providing deer with a nutritional boost can be critical.

by ***Matt Harper***

A couple of years ago, I was driving from California's Central Valley to Lake Tahoe. Leaving 80-degree temps in the valley, I wound up in the Sierra Nevada, driving through ever-thickening snow flurries. Then, through the drifting flakes, I saw a historical marker. To the drivers' frustration behind me, I slowed down just long enough to see it marked Donner Pass.

I've seen movies and read books describing the horrors of that ill-fated trip west, and I was a little aggravated with myself not knowing I was on that infamous trail, but there it was. There's a good chance you've heard of the Donner Party and Donner Pass. It's not necessarily just the harrowing experience the westward travelers experienced that might ring a bell. Rather, it's likely the measures that some of those poor people reportedly took to survive, deciding on an action so taboo it's looked upon with vomitous disdain. According to survivors and rescuers, some folks faced with starvation decided to use the only food source available — their own deceased. I don't know what it's like to be in a condition to make such a decision, but undoubtedly, they believed it was their only option for survival.

I apologize for beginning this article with such a weighty, gruesome analogy, especially for an enjoyable topic. But I wanted you to get in the mindset of what it must be like to struggle through prolonged, grueling conditions, driving you to unthinkable means of survival. In areas of the country that don't stay green all winter, where food is scarce to nonexistent or covered with snow and ice, white-tailed deer fight that battle. They might not size each other up for which herd member could supply the choicest cuts, but they are desperate to find life-sustaining food.

Getting deer to optimal condition quickly is always a winning strategy.

WINTER

In the mid- to northern regions whitetails call home, where snow and ice is a likely companion for several weeks if not months, winter-kill can be real. Several reasons contribute to this, but the main cause is lack of nutrition. Deer might not always die directly because of starvation, but also through weakness caused by an inadequate food supply, which opens the door to predation and disease. When the weather turns cold, deer cannot run to the grocery store to restock the pantry. When winter hits, whatever food was produced in spring, summer, and fall is all they have, and when that's gone, there is no more. An Iowa cornfield that provided carbohydrates for several weeks has been combined, and when deer and every other critter have picked through the detritus, it becomes several acres of barren wasteland. Soft mast is eaten quickly, hard mast is vacuumed up or covered, green lush browse is dried up and blown away, and hay fields are brown carpets. Even dried leaves and woody browse might be in short supply. That's the situation deer encounter each time a new year begins. I've often stood in my warm, cozy house and peered out the window at the frozen white landscape of the farm and wondered how any deer could make it until spring. Thankfully, deer are incredibly hardy creatures and have survived for thousands of years (some say millions) and, therefore, thousands of winters. They begin by storing fat reserves in summer and fall before Jack Frost comes calling. Using that fat storage is one survival mechanism. But also, a deer's metabolism slows into a pseudo-hibernation state. Deer do not crawl into a cave or hole to sleep for several weeks, but their digestive system slows down, resulting in lower food intake, presumably an adaptive means of cold-weather survival. Interestingly, even captive deer that have as much food as they want decrease their daily intakes in winter.

Survival traits aside, winter is still a damn rough time for deer — particularly young deer and mature bucks. Shoot a doe in the early winter, and you will likely find a nice layer of fat that she has built up for leaner times. Bucks — especially mature bucks — are a different matter. A buck harvested in early to mid-fall, before the rut begins, will have similar fat reserves as their female counterparts. Shoot a buck post-rut and your skinning knife will puncture skin and hit bone, the fat layer having been exhausted in the buck's frenzied attempt to perpetuate his genetic line. Post-rut bucks resume thinking mostly with their stomachs and search for any way to rebuild their body condition before heading into winter. Depending on food availability or the lack thereof post-rut, mature bucks can suffer greatly during this time. A fawn's first winter is likewise difficult, not because of rut but because of their immature size and physical limitations, which can cause threatening situations for simple locomotion and avoiding predators. That's why mature bucks and fawns are the most likely to succumb to cold weather's onslaught.

You might think, "Why am I not seeing dead deer all over come spring melt?" First, you might see that in some places during some years. A hard winter preceded by a summer of drought can cause significant winter kill. But nature has a great way of cleaning up, and many of the carcasses might go unnoticed. Even if there's no major winter kill, negative conditions might be at play and not nearly as noticeable as skeletal remains. Consider what's happening physiologically in the deer herd during late winter and early spring. Does are gestating, with the next year's fawn crops growing, or at least trying to grow. In early spring, does transition from their second to third trimester of pregnancy. During the third trimester, most of the fetal growth occurs, which is a huge draw on the nutritional needs of a doe. Does coming out of winter in poor body condition are far more likely to abort one or more fawns or have fawns with low birth weight. Low-birth-weight fawns are far less likely to survive the first few days after birth compared to fawns born at normal weights. Poor body condition, combined with a slow start to spring, can significantly decrease fawn recruitment and take a toll on the doe. Fawns coming out of a tough winter in poor condition continue to struggle to make it to their first birthday. They are also trying to grow, not just maintain their body, and a prolonged spring green-up can lead to stunted growth, which has a significant effect on their adult physical characteristics. Bucks are also just trying to make it through to spring, and they're starting to sport new antler buds, the foundation for that year's trophy head adornment. A buck must first regain body condition before the optimal amount of nutrients can be directed to antler growth. The worse the body condition and the later the spring green-up, the longer it takes to pour fuel to the antler-growing fire. That will absolutely lead to a set of hardened antlers that is not as good as what it could have been in better conditions.

MANAGING FOR EARLY SPRING NUTRITION

You can't control the weather. That seems like a dumb thing to say, as it's pretty obvious, but it doesn't stop many of us from trying to will the temperature gauge higher and force green to emerge. The best thing you can do is manage the situation as best as possible and ignore the weather.

We're talking about spring nutrition, but managing for that actually starts the previous summer, if not before. Your objective should be to provide as much food as possible, which is normally accomplished via good winter food plots. As mentioned, when plant and crop growth ceases, whatever food deer have at that time is what you will have until the next spring. Everyone has limitations they must deal with, such as the size and number of plots they can grow, and the equipment available. But generally, make the best plan you can with what you have. Using rough cow-

boy math, try to estimate the pounds of winter food supply a plot can produce, and then determine how many deer that will feed and for how long. It's rough, because if you have drought or flooding, your tonnage estimate can be off, and even though you have a general idea about the deer population on a property, its not exact and never will be minus an 8-foot fence. But do what you can, and remember, you're only trying to supplement and help, not be the sole determiner behind winter food for deer.

In states where it's legal, you can also use a feed supplement throughout winter and into early spring. A good example is Whitetail Institute's 30-06 Thrive. Part of the well-known 30-06 Mineral/Vitamin Supplement family, this product was designed for fall and winter to provide minerals and vitamins, and also fat-building energy for a deer's diet.

I've used Imperial Whitetail Clover for many years, and it continues to be a critical part of the food plot program on my farm. There are many reasons for this. Imperial Whitetail Clover is the backbone of spring and summer nutrition, and in the case of winter nutrition, it assumes another role. You have probably heard that Imperial Clover is the only clover bred specifically for whitetail nutrition, containing the specific traits needed for attractiveness, nutrition and digestibility. But when talking about late winter and early spring, winter hardiness becomes extremely valuable. In my experience, Imperial Clover is one of the last plants to stay green as winter approaches, giving deer access to nutrition deep into fall and even winter. Imperial Clover will go dormant during the coldest parts of winter, but I've actually seen it stay green under the snow when snow fell before exceedingly cold temperatures. But most important, Imperial Clover seems to be one of the first things to green up in early spring. I raise hay, clover and alfalfa and my Imperial Clover will always green up several days before my hay fields. That might seem like a small thing, but to a deer, beat up and punished for the previous few months, it's like warm chili on a cold, wet night.

CONCLUSION

If I had been around 180 years ago, traveling west in search of my fortune, I'm guessing I would not have any better chance of making it than the next person. It's easy for you to say what should have been done and point out the mistakes when you have the privilege of hindsight. But it seems that the odds of success would increase dramatically if a trip was planned with ample supplies to match potential challenges. From a deer management perspective, there's similarly no way to control and predict all that nature might bring. But the more we can plan and prepare, the better the odds for a good outcome. A head start is far more valuable than what you might think, as it gets you where you're going faster. Getting deer to the optimal condition quicker will always be a winning strategy.