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Land managers should understand the critical importance of doe nutrition and how it contributes to overall herd health and vitality.

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PHOTO BY CHARLES J. ALSHEIMER

Those of you who glanced at the title of this article but breezed over the subtitle might be disappointed that this is not an exposé on a legendary '80s hair band.

For many of us who grew up in that era, Motley Crue was a go-to during Saturday night cruises around town. But this is not *Rolling Stone*. It's a deer magazine. And we're not here to discuss the exploits of Tommy Lee but rather something far more useful: the importance of doe nutrition.

How many of us have sat in a tree stand, glimpsed a deer gliding up a trail and thought, "It's only a doe." I'm not saying the opportunity to shoot a doe and experience tasty cuts of meat is not exciting or fulfilling. But for someone seeking a mature buck, there's some disappointment when you discover those footfalls come from a doe and not a big buck. You might think, "Great, another article telling me that I shouldn't be so focused on the pursuit of mon-

cus on the nutritional plane of the doe from breeding to weaning to help ensure the herd remains strong and healthy year after year.

BREEDING

Doe nutrition is important year round, not merely when does are pregnant or raising fawns. In the same way that bucks require high-quality nutrition throughout the year to encourage maximum body and antler growth, does also need a consistently high nutritional plane for maximum proliferation. By late summer to early fall, does are weaning off the previous spring's fawns. At this time, does can appear to be in very poor body condition, having been "sucked down" by their fawns. Look at trail camera pictures of does with twins and triplets in August and you will often see their ribs showing. This is especially true when they lack quality nutrition.

It takes an extreme amount of energy, protein and minerals to produce milk,

ing season, does begin about a 200-day gestation period. In most of the country, that means prenatal fawn growth occurs during winter, which is typically the most nutritionally stressful time of the year for white-tailed deer. When daylight hours decrease and temperatures drop, plants stop growing, which means that whatever exists at that point is the total amount of food deer must live on until spring. Think of it as a pantry of food you must live on for several months without going to the grocery store. At first, food might be in ample supply. But deeper into winter, more food sources disappear.

Winter produces some of the harshest climate conditions deer must endure, and it's a pretty stressful time in a deer's yearly cycle. Meanwhile, fetal growth is occurring inside gestating does. As you would expect, does require additional nutrients to grow the fetus or fetuses in addition to what they need for her maintenance and condition. All nutrients are

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ster bucks." This article has nothing to do with hunting altruism. We know we must hunt bucks and does to manage the deer herd. This piece won't say you should or shouldn't focus on hunting trophy bucks. That's up to you. Rather, we'll discuss how the nutritional management of female deer is equally important to that of males.

WHY ARE DOES IMPORTANT?

That question seems ridiculously obvious considering it's impossible to perpetuate the species without does. But if you look beyond procreation, you discover that does are also vital for the health and vitality of the herd. Of course, bucks are involved in the production of offspring, but after they have finished their role in the breeding process, their relevance to the next generation is essentially zero. That responsibility falls on the doe, and her nutritional health throughout the reproductive and rearing process is highly influential on the overall success of herd proliferation. Land managers should fo-

and with so much of a doe's diet going toward lactation, there's little left to maintain body condition. After a doe weans her fawns, she must quickly regain body condition to prepare for the upcoming breeding season. The level of body condition is influential for breeding success, as does in poor condition are less likely to become pregnant. In general, it's a natural mechanism to protect the doe and the herd. A doe in poor body condition might not withstand gestation, especially during winter. For the herd, a doe in poor body condition can be a sign of overall lower nutrient availability for the entire herd, so adding more mouths to feed is counterproductive. Therefore, biological mechanisms kick in to slow down reproductive success to protect the herd. These mechanisms can include unsuccessful copulation, delayed or absent estrous cycles, or decreased likelihood of multiple viable embryos.

GESTATION

Immediately after a successful breed-

important during pregnancy, but energy is especially critical considering a doe needs it to maintain body condition during winter.

Nutritional demands remain high during the entire gestation period, but they're particularly high during the final trimester. That's because most fetal growth occurs during the last third of gestation. During the first few months of pregnancy, fetal demands are less, so nutrient availability, or the lack thereof, will have less impact on fetal survivability. That is, however, unless the doe is already in poor body condition. Even if a doe mates successfully, if she is in poor condition and continues to have limited nutrition, fetal reabsorption of one or more prenatal fawns can often occur. In general, during early- to mid gestation, a doe's health takes precedence over fetal development. But in the final stages of gestation, fetal development tends to be physiologically prioritized.

If a doe is in poor condition or in a habitat with subpar nutrition, several



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things can occur. In extreme conditions, one or more of the fetal fawns can be aborted. More commonly, fawn birth weights can be below average, which correlates to lower fawn survivability, especially in the first few days of life. With April and May composing most of the third trimester of gestation, food sources typically begin to become more prominent. However, in years with late springs and slow green-up — particularly when preceded by a long, cold winter — it's not uncommon to see a high incidence of fawn mortality because of low birth weights.

LACTATION

Like most mammals, the survivability of fawns after birth depends entirely on a doe's ability to produce milk. Yes, a fawn can die from predators, be hit by a car or die from a disease or birth defect. However, if they can't eat enough, they will not live. Compared to other species, whitetail fawns only have a short time when they rely completely on their mother's milk. In a little more than two months, they can survive without nursing. But within those two months, doe milk supply is critical.

Fawns grow quickly and require adequate amounts of nutrient-dense milk to support that growth. Doe milk is far more nutrient-dense than cow's milk, specifically in fat and energy content. Lactation demands a high nutritional plane to produce enough milk to optimize fawn growth, especially when raising multiple fawns. In fact, doe nutrient requirements are highest during lactation, with protein needs ranging to and even exceeding 18 percent. Likewise, en-

ergy and mineral needs are extremely high during lactation. If a lactating doe lacks nutrition, it doesn't necessarily change the nutrient makeup of the milk but rather affects the quantity produced. In other words, the percentage of fat in the milk might stay roughly the same regardless of the doe's diet, but the total amount of fat available to a fawn or fawns will change.

So what happens if a doe does not have adequate nutrition to produce enough milk for normal fawn growth? The worst-case scenario is increased fawn mortality. This can usually be seen in twins and triplets when one or more of the fawns receives inadequate amounts of milk and grows increasingly weak and more susceptible to predation and disease. Even if a fawn survives, lower levels of nutrients can result in stunted growth, which can persist even as an adult. In short, making sure does have access to high-quality nutrition will positively influence the survivability and quality of the fawn crop.

RAISING TOMORROW'S WALL-HANGERS

I love hunting big, mature bucks. I manage my farm to make sure bucks have access to the nutrition they require to maximize health, body weight and antler growth. But that doesn't mean I forget about does, as they are the deer that produce the buck fawns I'll be chasing in four to five years. However, simply producing fawns doesn't fit into a management strategy that involves maximizing every nutritional aspect of the deer herd. I want to ensure good levels of fawn recruitment and also make sure those fawns can achieve maximum growth po-

tential. Honestly, this is true regardless if a fawn is a buck or a doe. The desire to maximize buck fawn growth is self-explanatory, but I also want to maximize doe fawn growth, because the bigger and healthier the doe fawn, the better chance she will be a high-producing adult doe. Essentially, that philosophy echoes the ultimate deer management goal: to produce the healthiest, highest producing, highest quality overall deer herd. If you do that, you've greatly increased your chances of chasing big, mature bucks year after year.

CONCLUSION

The good news concerning nutritional management practices for does is they align with those of managing bucks. During fall and winter, when breeding and gestation occur, having high-energy food plots such as Whitetail's Winter-Greens or any of the company's fall/winter plots will help ensure that does have access to the energy they need for body condition and pregnancy. Where legal, supplementation with products such as Thrive will further increase their nutritional plane. In spring and summer, perennial plots that are highly digestible and high in protein and energy, such as Imperial Whitetail Clover, provide a perfect supplement to native vegetation for the nutrition needed for lactation and fawn development. Mineral supplements (where legal) such as 30-06 and 30-06 Plus Protein round out the nutritional profile by providing vital minerals and vitamins.

So if you see a group of does in your food plot during a summer evening or notice trail camera pictures of does with fawns at a mineral site, don't pass it off like they're a nontarget species. Think a bit deeper, and you will see that you are helping to produce an overall better deer herd and greatly improving the odds of having trophy bucks down the road. After all, that little fawn that trots out with a doe to nibble and pick at a lush food plot might be the deer that takes your breath away a few years later.

