

A doe's physical condition controls her milk production. That's one of the most critical factors in fawns' odds of survival. *Photo by Linda Arndt*

FAWN FACTS (PART 2)

BY DR. JAMES C. KROLL

Last month, we looked at some of the biology behind the whitetail's breeding and gestation cycles, ending with newborn fawns on the ground. Now let's delve into some of what happens along the way as these young deer try to make their way into the adult population.

MILK DOES A BODY GOOD

After giving birth, over the next two to three weeks the doe remains separate from her usual social group. During this span, she'll return to the fawning area to feed her offspring three or four times over each 24-hour period. To do so, she approaches the area where she last fed one of the fawns, then calls with a low "mew." A fawn hearing this will come running, knowing it means mealtime is imminent. Even so, each feeding lasts only a few minutes.

As a fawn nurses, the doe licks its rear end to stimulate defecation and urination. Believe it or not, these excreta she eats/drinks. Why? The action presumably is aimed at reducing odors a predator might detect.

Over the first two to three weeks of life is when the majority of fawn mortality occurs. While predators do take some fawns at this time, most deaths are due to nutritional deficiencies on the part of the doe. She'll produce 8-72 ounces of milk per day, depending on her own nutritional intake. Because of this drain on her resources, by the time a fawn is weaned, its mother will have lost a great deal of weight.

There's no evidence a doe with twins will return to the same fawn first during each nursing period. But whichever fawn she selects at the beginning of each period has the opportunity to get the lion's share of her milk. If there's only enough milk to support one fawn, the second gets little or nothing when it's his/her turn. The inability to produce a greater volume of milk is why whitetails long ago "selected" a normal litter size of two per adult female.

MEETING THE FAMILY

When the fawns are about two weeks of age, the doe brings them out to meet the rest of her social group. Depending on her social standing, the other does will either accept or pick on these fawns if they try to nurse or get near another doe's fawns. Over time, however, the new social group solidifies as old and new members get to know each other.

SHIFTING DIETS

Although fawns often will continue to nurse well into fall, they need milk only for the first 45-60 days. And they begin nibbling at succulent vegetation by their second day of life. The rumen is designed at birth to let milk

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bypass the first "stomach" chamber and go straight into the true stomach. However, within a few days the rumen begins to enlarge and become more active, due to beneficial microorganisms picked up by the fawn eating soil and licking the mother. These microbes are part of the normal digestive system in all ruminants, helping to break down vegetation into components that can be absorbed for the body's needs.

SURVIVING WINTER

A fawn that still has its spots hasn't yet been weaned. In parts of the Deep South, seeing a spotted fawn in early fall isn't unusual, due to a relative late rut. And due to relatively mild winters, such fawns can survive. However, if a northern fawn is born too late in the year, its probability of survival is virtually zero.

The greatest factor in determining the number of fawns recruited into the herd is the timing and conciseness of the rut. In a normal rut, most conception takes place over about a week. In a "trickle" rut, though, does conceive as they come back into breeding condition after a hard summer nursing period. For this reason, does that lost at least one of their fawns the previous summer ironically are in a better position to be bred at the proper time the following fall.

In most geographic areas, the number of fawns still alive by September is only about 50 percent (50 fawns per 100 does). In the Midwest, however, going into deer season I seldom see a fawn crop lower than 80 percent. This can be a deceiving number, in that it leads folks to believe their recruitment rate is 80 percent or greater. In those areas, winterkill of fawns is more significant. True recruitment (the percentage of fawns still alive the following spring) is probably no more than 15-30 percent of those born.

Winterkill isn't a universal threat in all northern latitudes; some locations don't often have an extreme snowpack. But it can be very high in areas where there's little winter thermal cover (such as dense conifers) and/or where deer tend to yard up (not a natural behavior, as once thought).

HOW MANY FAWNS BREED?

In a well-managed whitetail herd, as many as 40 percent of doe fawns become sexually mature during their first autumn. These fawns experience their first estrus period after the primary rut. This of course can cause a sudden, late flurry of buck activity.

A rule of thumb we developed for most areas is that a minimum live weight of 60 pounds will allow a doe fawn to conceive. Interestingly, when these fawns give birth, over 70 percent of their fawns are bucks!

IN CONCLUSION

I hope this two-part look at whitetail fawns has provided you with some new information and has cleared up some misconceptions about them. These obviously are the bucks and does of tomorrow, so knowing what affects their survival is critical to managing the herd for better health and better hunting. NAW

