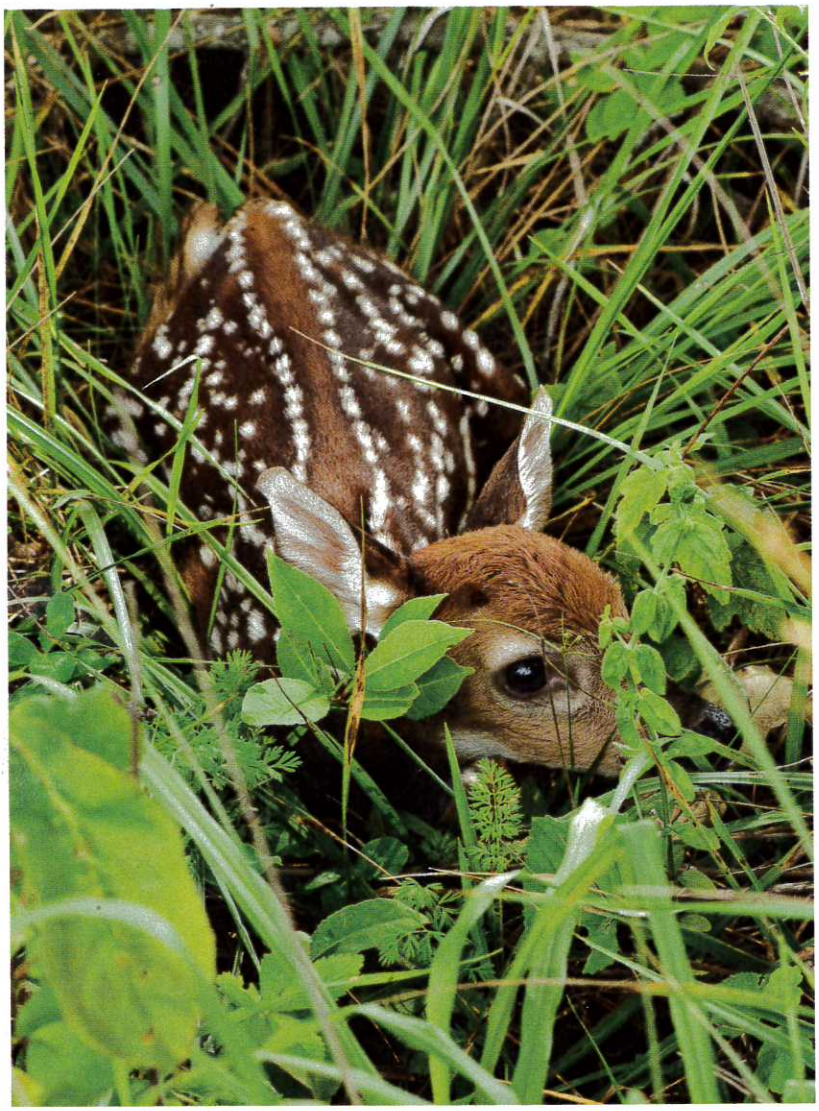


You can't determine a fawn's gender from the number or arrangement of its spots. *Photo by Tommy Kirkland*

# FAWN FACTS (PART 1)

BY DR. JAMES C. KROLL

There's nothing as pretty as a newborn whitetail fawn.

In late spring and early summer each year, one of my favorite activities is to search for them here at the Institute for White-tailed Deer Management & Research facility. We use information on fawns as one indicator of herd health and to assess how well our "deer factory" is operating.

It's a challenge to find really young fawns hidden among the dappled foliage of the forest understory. Their nature is to let you walk right by them without moving so much as an eyelash. Instinctively these vulnerable creatures know that, if they should panic and run, a predator will make short work of them.

Grab one, however, and it will issue an ear-splitting scream that quickly brings its mother to help. Few other animals are as vicious as a doe that thinks her fawn is being attacked. I've had my hat knocked off and my arms bloodied by their flailing hooves!

A doe has a great deal to protect this spring. Last fall, she went to the trouble of trying to find the fittest buck in the woods to father her offspring. All winter she sought out adequate nutrition to support the exponential growth rate of two fetuses. Now, here in late spring, she's carefully selected the perfect place to give birth to and hide her newborns. Moving forward, all summer she'll be doing her best to nurture, protect and teach them — all so the best genes can be perpetuated in the herd.

It should be obvious what a critical role fawns play in building and maintaining a sound whitetail herd. Without their survival and good health, the population soon will be in trouble. What determines fawning success, and how does it play into our hunting prospects?

## BREEDING CHRONOLOGY

A lot has been written about the whitetail rut and factors that determine the timing of breeding. There are moon models and solunar tables in many outdoor publications, all aimed at helping you pick the best time to hunt. Yet there are so many factors affecting rut timing that it wouldn't be possible to cover all of them here. Let's just say the most important thing to consider about the timing of the rut is the why, not the *how*.

Each of the many subspecies of whitetails scattered from northern Canada into South America has a unique appearance and habitat preferences. But the timing of breeding is one of the most critical differences.

My research and experience have shown that timing of the rut is most influenced by the best time for a doe

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to wean her fawn(s). Once weaned, a fawn is pretty much on its own nutritionally; from then on, no amount of parental care will significantly lessen the effects of poor growing conditions or low-quality foods.

In South Texas, most does breed in December. That results in fawns being weaned shortly after the hurricane season, which brings abundant rains to support new vegetative growth in a semi-arid environment. Whitetails in the Midwest tend to breed one full estrous cycle (25-27 days) earlier, so fawns are weaned when native vegetation is at its highest abundance and quality.

Our research over nearly four decades supports that the average gestation period, no matter when whitetails breed, is 198 days. But that's just what it says: the *average*. The actual range, from our data, is 187 to 212 days.

There are only two ways to determine the time from conception to birth. The first involves breeding captive deer and then euthanizing the does at specific times to measure fetuses. There's even a "fetal scale" (forestry-suppliers.com) that lets you age a fetus with a degree of accuracy.

We've chosen to just breed does in our research pens, then carefully monitor them the following spring to mark the exact dates of fawning. In this way, we've been able to determine impacts of nutrition and age on birth dates.

Many factors combine to determine how long a doe will carry her fawns. These include moon phase as parturition (birth) nears. Other factors include nutritional and psychological stressors.

As fetal growth approaches the time of birth, the nutritional demand on the doe increases exponentially. This is the period in which the fetus will grow the most over the shortest period of time. The second-fastest growth is from fall to spring. During that span, a fawn's weight will almost double.

## FAWNING BEHAVIOR

There's nothing more "cranky" than an expecting doe! She tends to move away from the other does and will even attack another doe that dares to invade her meticulously chosen location.

Certain vocalizations also characterize the birthing period. The doe will walk nervously about, making bleating calls and even grunts. Clearly she's in a condition of agitation as that time approaches. Birthing locations are carefully selected, and we have data clearly showing that an experienced doe will revisit and jealously guard birth sites she's previously used.



The author examines a newborn fawn at his research facility in Texas. This close observation has provided many insights. *Photo courtesy of Dr. James C. Kroll*

Fawning most often takes place at night, but it can extend into the morning if labor proves difficult. Experienced does don't have a prolonged labor period, though younger ones can experience some delays.

Growing up on a cattle farm, I found calving season a nervous time. It commonly involved "pulling" calves from cows that were having difficulty delivering on their own. But we rarely see birthing problems with wild deer. I've seen a doe get up and walk around with a fawn hanging from her birth canal, but perhaps this helps with delivery.

A doe giving birth to two fawns most often will deliver them in one place. You might have read that she'll tend to have the first fawn in one place, then move to another location to deliver the second, but that doesn't make biological sense.

Shortly after birth, the placentas are expelled. The doe commonly eats them. This probably serves two functions: to get rid of something that might attract a predator, and to regain some nutrients lost during fetal growth.

Once both fawns have been born, the doe begins what we call the "brooding period." Its purpose is to let the fawns dry out, which takes about an hour, and to let them have that all-important first nursing. The doe lies on her side and allows the fawns to crawl to her udder and nurse. They're getting colostrum, a thick liquid that contains antibodies and critical nutrients.

After an hour or two, the doe takes her fawns on a short trip around what is called her *natal range*. It's fun to watch the newborns try to keep up with her. Suddenly, she makes a little "clicking" sound, and one of them disappears into the vegetation. The purpose of this instinctive strategy is obvious: It increases the probability that at least one fawn survives.

The spot pattern on a fawn is designed to help hide it in a forest understory dappled with light and dark areas. In case you're wondering, there are 250-300 spots per fawn, with no difference between bucks and does in terms of the spots' number or pattern. So that doesn't help us figure out how many new bucks there are in the population.

## NEXT MONTH

In the July issue, we'll set the record straight on some other fawn fallacies that have persisted over the years. NAW