

MODULE 1

Determining the Due Date

Learning Objectives

At the completion of this module, the breeder should be able to explain the normal length of canine gestation, understand the difference between breeding dates and ovulation dates, describe the methods used to predict whelping dates, recognize why some litters arrive earlier or later than expected, and develop a timeline for preparing for the arrival of puppies.

Why Accurate Due Dates Matter

One of the most common mistakes made by novice breeders is assuming that puppies will arrive exactly sixty-three days after breeding. While this occasionally happens, it is often inaccurate and can create unnecessary concern or, worse, cause a breeder to overlook a developing problem. Accurate due date prediction allows breeders to prepare the whelping area, arrange their schedules, coordinate veterinary care, and monitor the bitch appropriately during the final stages of pregnancy. Understanding when puppies are expected also helps breeders distinguish between a normal pregnancy and one that may require veterinary intervention.

To understand due dates properly, it is important to understand how canine reproduction differs from that of many other mammals. In dogs, ovulation does not immediately produce fertile eggs. After ovulation occurs, the eggs require approximately forty-eight hours to mature before fertilization can take place. As a result, the timing of ovulation, rather than the breeding date, is the most accurate way to predict the onset of labor. A normal canine pregnancy lasts approximately sixty-three days from ovulation, not from the date of breeding.

Many breeders become confused when a bitch appears to be pregnant for sixty-eight or even seventy days after breeding. This often reflects the remarkable longevity of canine sperm. Healthy sperm can survive within the reproductive tract for up to seven days. If breeding occurs several days before ovulation, fertilization may not occur until much later. Consequently, counting from the breeding date may give a false impression that the pregnancy is unusually long when it is progressing normally.

Veterinary reproductive specialists rely heavily on progesterone testing to accurately determine ovulation. By measuring progesterone concentrations during the heat cycle, veterinarians can identify the fertile period and estimate the due date with a high degree of accuracy. This approach is particularly valuable when using chilled or frozen semen, performing artificial insemination, or managing bitches with previous fertility problems.

Pregnancy can usually be confirmed by ultrasound between twenty-five and thirty days after ovulation. Ultrasound is useful for identifying fetal heartbeats and assessing fetal viability, but it

is not reliable for determining litter size. Later in pregnancy, usually after day fifty-five, radiographs become an important diagnostic tool. At this stage the fetal skeletons have mineralized and can be counted more accurately. Radiographs can also help identify unusually large puppies and provide valuable information when preparing for whelping.

During the first month of pregnancy, the bitch can generally continue her normal routine. Nutrition should remain unchanged, and unnecessary supplements should be avoided. During the second month, fetal growth accelerates dramatically. Approximately seventy percent of fetal development occurs during the final three weeks of gestation, making this the time when nutritional demands increase substantially. Gradually transitioning to a high-quality growth and lactation diet helps support both the bitch and her developing puppies.

Many myths surround canine pregnancy. One of the most persistent is the belief that every bitch whelps exactly sixty-three days after breeding. Another common misconception is that a bitch is automatically overdue if she has not delivered by day sixty-three. In reality, gestation length must always be interpreted in relation to ovulation timing. Understanding these concepts allows breeders to make informed decisions and avoid unnecessary panic.

Key Points

- Canine gestation averages sixty-three days from ovulation, not from breeding.
- Sperm can survive in the reproductive tract for up to seven days.
- Progesterone testing is the most accurate method for predicting due dates.
- Ultrasound confirms pregnancy and fetal viability but does not accurately count puppies.
- Radiographs after day fifty-five provide the best estimate of litter size.
- Most apparent "overdue" pregnancies result from incorrect calculation of ovulation timing.