

MODULE 3

Temperature Monitoring and Predicting Labor

Learning Objectives

At the completion of this module, the breeder should be able to explain the hormonal changes that occur before labor, accurately monitor rectal temperatures, interpret temperature records, recognize the signs of Stage I labor, and distinguish between normal pre-whelping changes and situations that require veterinary attention.

Understanding the Role of Progesterone

One of the most useful tools available to breeders during the final week of pregnancy is temperature monitoring. To understand why it works, it is helpful to understand the role of progesterone. Progesterone is the hormone responsible for maintaining pregnancy. Throughout gestation, progesterone concentrations remain elevated, helping to support the uterus and developing fetuses.

As labor approaches, progesterone levels fall dramatically. This decline is a necessary trigger for parturition and is accompanied by several physical and behavioral changes. One of the most consistent changes is a decrease in body temperature. Because progesterone has a warming effect on the body, its sudden decline often causes a measurable drop in rectal temperature shortly before labor begins.

Although temperature monitoring is not perfect, it remains one of the most practical and useful methods for predicting the onset of labor when used alongside other observations.

How to Monitor Temperature

Temperature monitoring should begin approximately seven days before the anticipated due date. A digital rectal thermometer is preferred because it provides the most accurate readings. Temperatures should be taken at the same times each day whenever possible, ideally two to four times daily. Consistency is important because it allows trends to be identified more easily.

The thermometer should be lubricated and gently inserted into the rectum for approximately one inch. Readings should be recorded immediately in a notebook or digital log. The goal is not simply to obtain individual numbers but to establish a pattern over several days.

Most pregnant bitches maintain temperatures between 100°F and 102.5°F. Normal variation exists among individuals, so breeders should become familiar with the normal range for their bitch.

Recognizing the Temperature Drop

In many bitches, the rectal temperature falls below 99°F within twelve to twenty-four hours of labor. Some bitches experience a dramatic drop into the 97°F to 98°F range, while others show only a modest decrease. Not every bitch demonstrates a clearly identifiable drop, and some breeders become frustrated when they cannot detect one.

For this reason, temperature monitoring should never be used as the sole predictor of labor. It is best considered one piece of information that contributes to the overall picture.

A typical temperature record might look like this:

Time	Temperature
Monday Morning	101.2°F
Monday Evening	101.0°F
Tuesday Morning	100.8°F
Tuesday Evening	98.7°F
Wednesday Morning	Active Labor

When a significant temperature drop occurs, breeders should prepare for labor while continuing close observation of the bitch.

Behavioral Changes Before Labor

Hormonal changes that trigger labor also influence behavior. Many bitches become restless and unsettled during the twenty-four hours preceding delivery. Some seek constant companionship and refuse to leave their owner's side. Others prefer solitude and repeatedly retreat to the whelping box.

Nesting behavior often intensifies during this period. The bitch may dig vigorously at bedding, shred newspapers, rearrange blankets, or repeatedly enter and exit the whelping area. These activities are instinctive preparations for the arrival of puppies.

Panting is also common. Some bitches tremble, pace, or appear unable to settle comfortably. Appetite frequently declines and many refuse meals entirely during the final twenty-four hours before labor begins.

While these behaviors are generally normal, they can be confusing for inexperienced breeders. The key is to observe trends rather than isolated events. A bitch that stops eating, becomes

restless, begins nesting, and experiences a temperature drop is very likely entering the first stage of labor.

Understanding Stage I Labor

Stage I labor is often the most overlooked phase of parturition because there are few obvious signs. During this stage, the cervix gradually dilates and the uterus begins coordinated contractions. These contractions are generally not visible externally.

Stage I labor may last from six to twenty-four hours. During this time, the bitch may appear anxious, uncomfortable, or restless. She may alternate between sleeping and pacing, seek attention from her owner, or repeatedly visit the whelping box.

It is important for breeders to recognize that Stage I labor can progress slowly and that intervention is rarely necessary. Many first-time breeders mistakenly assume something is wrong because no puppies appear immediately. Patience is often the most valuable skill during this stage.

The bitch should be monitored closely but disturbed as little as possible. Excessive interference can increase stress and potentially prolong labor.

Preparing for Delivery

Once Stage I labor begins, all supplies should be assembled and readily accessible. Towels should be organized, scales checked for proper operation, identification collars prepared, and emergency veterinary contact information readily available.

Breeders should review the expected puppy count if radiographs have been taken. Knowing the anticipated number of puppies can be extremely valuable later during labor and delivery.

The whelping area should remain quiet and free from unnecessary visitors. Although family members may be excited, excessive activity often causes additional stress for the bitch.

False Alarms and Common Mistakes

Not every behavioral change signals immediate labor. Some pregnant bitches exhibit nesting behavior for several days before delivery. Others show fluctuations in appetite or activity without entering labor. Likewise, some bitches never display a noticeable temperature drop.

One common mistake is assuming that labor must begin immediately after a temperature drop. While many bitches deliver within twelve to twenty-four hours, individual variation exists. Another mistake is becoming overly focused on the thermometer while ignoring the bitch's overall behavior.

The most successful breeders combine temperature records, behavioral observations, and common sense. The entire picture is far more valuable than any single measurement.

When to Contact Your Veterinarian

Most bitches progress through Stage I labor without difficulty. However, veterinary advice should be sought if the bitch appears distressed, develops abnormal discharge, exhibits severe pain, or if there is uncertainty regarding the due date.

Breeders should never hesitate to contact their veterinarian when concerned. It is always preferable to ask questions early rather than wait until a genuine emergency develops.

Key Points

- Progesterone levels fall dramatically before labor begins.
- A drop in progesterone often causes a decrease in rectal temperature.
- Temperatures should be monitored two to four times daily during the final week of pregnancy.
- Many bitches experience a temperature drop below 99°F within twenty-four hours of labor.
- Stage I labor involves cervical dilation and may last six to twenty-four hours.
- Nesting, panting, pacing, trembling, and loss of appetite are common signs of impending labor.
- Temperature monitoring should be used together with behavioral observations.
- Patience is essential during Stage I labor, as puppies may not appear for many hours.