



Tips for Heat Checking Goats

By Jackie Nix

Accurate heat detection is the key to a successful artificial insemination program. If you can't catch the doe in heat, it doesn't matter how good the semen is, how careful your thawing procedure, or how skillful your insemination technique.

What to Look For

The signs of heat are often mistaken and misunderstood. Classic signs such as restlessness, tail twitching, roughened tail head, dirty flanks, swelling around the vulva, vaginal mucus discharge and the mounting of other animals are often thought of as the main signs of heat, but they are in fact only **secondary signs** of heat. Secondary signs of heat may indicate that the doe will soon exhibit standing heat, is now exhibiting standing heat or has already gone out of heat. The **one true sign** of estrus or heat is **when the doe stands still to be mounted by another goat**. This is known as "standing heat". Ovulation occurs an average of 30 to 36 hours after a doe first exhibits standing heat. This is the reason that inseminations should be based on observation of standing heat only and not on the secondary signs of heat.

Identification

Successful heat detection hinges on accurate identification of each doe. You can't breed 'em if you don't know who they are! It is important that all does be easily identifiable. Be sure that the identification method you choose is clearly visible from a distance. Popular methods include: ear tags, neck chains or ankle bands.

Where to Observe

No special facilities are needed. Basically, the area should be large enough to allow the does to mingle freely, yet small enough to allow them all to be observed at the same time. The area should also provide adequate footing so that the does don't slip during bad weather. Dairy goats may also require a sheltered area since they tend to be less active in cold, wet weather.

When to Observe

Animals tend to be more sexually active around dawn and dusk, which also corresponds to the coolest times of the day as well as times when human activity tends to be minimal. For whatever reason, observations of at least 30 minutes each at dawn and dusk will allow you to catch a large percentage of does in heat. The best times to watch are first thing in the morning before feeding and/or milking and late in the evening after milking and/or feeding have occurred. If your herd is in a large pasture, gather them up into a small area (a corner of the field will work) to observe. This will make your identification of the does easier as well as increase the interaction between does (see below). You and the does should not be doing anything else while observing for heat. This means that you shouldn't check for heat while feeding, milking or cleaning the barn.

Additional Information

Research with cattle has shown that sexually active cows form sexually active groups. More females in a sexually active group result in more sexual activity. One experiment demonstrated that the addition of heifers in heat resulted in more mounting activities. In short, when only one heifer in the group was in heat it mounted others or was mounted once every 20 minutes, when 3 heifers were in heat at the same time, they mounted or received mounts ever 2.5 minutes! This information can be extrapolated for use in goats since the two species are very similar in this respect. For this reason, individual does can be very hard to catch in heat and must be observed more closely.

Once you have caught the does in standing heat the next important step is to **write it down!** Don't rely on memory. A small pocket notebook is very handy for this purpose. It only takes a few moments to write down the name or number of the doe and this simple task can help avoid costly mistakes later. It is also a good idea to record the heat dates of all does regardless of whether or not you plan to inseminate them. This will help you to establish their estrus cycle lengths (the average is 21 days) and will also allow you to detect abnormalities quickly so as to minimize unproductive days.

In summary, heat detection is key to a successful artificial insemination program. The one true sign of heat is the doe standing to be mounted by other goats. Does should not be inseminated based solely on secondary signs of heat. Does should be observed in a place that allows free mingling but also allows observation of all does at the same time. Does need to be identifiable from a distance. The best time to heat check is at dawn and dusk. Once you have identified which does are in heat, it is important to write down the name and/or number of the goat.

Remember that optimum reproductive performance is dependent on proper nutrition, including mineral nutrition. Deficiencies in trace minerals such as selenium, copper, zinc and manganese can result in lack of libido (silent heats), reduced conception rates, early embryo deaths, and other reproductive failures. It is vitally important to supplement does with a complete goat mineral such as the **Sweetlix 16:8 Meat Maker mineral** or **Sweetlix Caprine Magnum-Milk** prior to and during breeding season for optimum reproductive performance.

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