Tracking the Bitch for Breeding Using Ovulation Timing

For most breeders, the thought of one more expense associated with breeding can be a little overwhelming! Between the money we invest in appropriate health testing, pedigree assessment, showing/training/conditioning, stud fees, pregnancy management and neonatal care it isn’t surprising when I see eyebrows go up from my experienced breeders when requesting ovulation timing in addition to everything else! I would like to take the opportunity to explain why ovulation timing can be so valuable as well as give some general guidelines for the use of this information.

Ovulation timing is utilizing serial progesterone testing to determine when ovulation in the bitch occurs. Quantitative progesterone testing (using an RIA or CIA machine – not an in-house test kit) gives us very accurate information regarding the following things:

1. Timing the actual breeding to increase fertility and maximize litter size – this is true whether you are performing a natural breeding, fresh collection AI, fresh chilled or frozen semen breeding using TCI or surgical inseminations! If we can narrow down our ovulation date to a 24-hour window – we know exactly when the semen needs to be deposited to meet the eggs when they are mature enough to be fertilized. When the Progesterone reaches 5.0 or higher – we have reached ovulation and will plan on our breedings within a 48-72 hours post ovulation. This varies with semen quality, type of breeding, etc. We advise based on the individual situation.

2. Ovulation timing decreases the need for multiple breedings as performed commonly with natural breeding without a tracking of the heat cycle. This can be hard on the stud dog, difficult to arrange and provide a very large window of when a dog has to be available for breedings. With ovulation timing, one or two breedings are all that are necessary and overall can decrease the expense of the breeding itself.

3. When ovulation is identified, we can narrow down the whelp date to +/- 24 hours! This helps breeders know exactly when to expect the litter, to know if they are in trouble with a dystocia or if the parturition dates are too long and of course plan an elective C-Section if this is needed. When using breeding dates to determine a whelp date your range is from 58-72 days. When using an ovulation date – it is 63 days from ovulation (independent of your breeding dates!). This is more scientific and accurate then the traditional counting method. Fetal mortality rates are decreased and therefore the savings of maintaining live puppies outweighs the expense that was invested during the breeding timing. We commonly use ovulation timing to determine a date to induce bitches to whelp on a planned basis and prevent dystocia emergencies in the middle of the night and the disaster emergency C-Section!

4. If a mid-gestational disease develops (gestational diabetes, uterine infections, insufficient luteal phase, etc) then we have accurate information about gestational age of the feti and can make appropriate treatment choices for the bitch and puppies. Without ovulation timing, we could be off by a week on gestational aging and this can change our treatment options and increase fetal mortality.

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