

WHY “5” IS NOT ALWAYS THE MAGIC NUMBER

By Shannon Stone

How many times do we hear from bitch owners, “She hit a “5” and I bred her, but we didn’t get Puppies”? Too many times to count, so let’s back up a bit...

For many years, we’ve been told that bitches ovulate once their progesterone level reaches 5 ng/ml, so we have bred them, either naturally, or with an AI, according to that rule. Now that chilled and frozen semen is so readily available, and we have different options for insemination procedures, the game has changed dramatically.

Bitches can ovulate between 4 ng/ml – 11 ng/ml, and no two bitches are the same. Many times, the same bitch will have entirely different levels in consecutive heat cycles, so that is why proper progesterone timing is key to a successful breeding.

It’s a good idea to start progesterone testing on your bitch to get a baseline number, around Day 6 or Day 7 of her heat cycle. At this early point in her season, you should be able to skip a couple days in between tests, as her number will most likely still be quite low.. Very seldom do we go more than two days in between tests, and we always test on Friday so we know how to plan for the weekend. As progesterone levels rise, we START to watch for ovulation around a high 4-5 ng/ml. Once we see that “MAGIC” number we run another test at the same time the following day. This is where most bitch owner’s go wrong...they skip this next test, so they really have no idea if their bitch truly ovulated. At this point, we need to confirm she did indeed ovulate. To confirm ovulation, we must see at least a 3-4 ng/ml point jump within a 24-hour period. If we do not see a full 3-4-point jump, we test again the following day, at the same time, as we need to stay around 24 hours between tests. If we run a progesterone test the following day and have a full 3-4 point jump overnight, we have confirmed ovulation the prior day.

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| BITCH #1 | 2/2/19 0.23 ng/ml | 2/4/19 1.07 ng/ml | 2/6/19 3.23 ng/ml | 2/7/19 4.22 ng/ml | 2/8/1 9 5.16 ng/ml ** | 2/9/19 9.11 ng/ml | | | |
| BITCH #2 | 3/6/19 0.77 Ng/ml | 3/8/19 1.39 ng/ml | 3/10/1 9 3.66 ng/ml | 3/11/1 9 5.72 ng/ml | 3/12/ 19 6.34 ng/ml | 3/13/1 9 8.42 ng/ml | 3/14/1 9 9.79 ng/ml ** | 3/15/ 19 16.2 1 ng/m 1 | |

** OVULATION

As you can see from the chart above, these two bitches both had ovulation confirmed, but ovulated at entirely different numbers. Bitch #1, ovulated at 5.15 ng/ml, and Bitch #2, ovulated at 9.79 ng/ml. Both of these bitches tracked perfectly normal and did exactly what we would want to see. Too many times we tend to get hung up on the “number” instead of the progression. It’s not a number that we are looking for, but that nice jump which indicates ovulation. If Bitch #2 had not been tested past the 5.72 ng/ml result, and the owner had bred her from that “MAGIC” number, she most likely would not have conceived, or would have a smaller litter.

Once we have confirmed ovulation, we know it can take up to three days for her eggs to mature and be ready for fertilization. Different vets have different protocols for when they start breeding post ovulation, but the general rule of thumb is if using fresh semen, you basically can start breeding right away, as the semen lives for several days inside the bitch. If using chilled semen, ideally one would breed on Day 2 & Day 4 post ovulation, and if using frozen semen, one would breed on Day 3 and/or Day 4 post ovulation depending on the type of insemination being performed.

One recommendation I like to give is no matter where you do your testing, stay with the same machine/facility and have your tests run the same time each day. All machines will run slightly different and each facility will know their machine, so if you change midstream, your results will not be as accurate.

Happy Puppy Breath!