

The Queen

(Her reproductive cycle may surprise you)

There is a thoughtful new movement designed to get to the next and final phase of ending domestic annual over production of kittens. The over-production problem is becoming known in animal shelters as the *kitten tsunami* which occurs each late spring/early summer.

The solution is preventing successful winter mating season through timely sterilization. I will not recount the number of advantages of feline sterilization (spay/neuter.) Most reading this already know them. But what is not generally known is the female feline reproductive cycle. That cycle, when understood, is the driving force behind the *spay by 4 or 5 months of age* championed by several profile groups.

Caring pet providers, who do not want to allow the nearly inevitable, unplanned and unwanted pregnancy to occur, must request the fail-safe spay **before** the predictable breeding season arrives. That means all moms of this past year and all new potential queens by 5 months of age should have their once-in-a-lifetime sterilization surgery.

Where to start: Accompanying this text is a page with four boxes depicting a calendar with the traditional month and date of each of the four seasons. It will be helpful to refer to the time of year with this outline.

O.K. Let's put this basic nature's plan for cats into an organized and useful outline. Let's start with all queens in the non-sexually active state = December. December 21st is the start of the winter season, marking the shortest day of the year with each succeeding day becoming longer. The incremental increasing lengths of daylight that begin after December 21st are being received through the eye and sent by the queen's optic nerve signaling this fact to the pituitary gland which, in turn, makes a hormone signaling the ovary that it's time to make follicles! Pretty amazing. The follicles, of course, make the eggs and estrogen. It is the estrogen that makes the queen into what we see: a vocal tom-seeking maniac. The mating season is on! The toms, of course, are always ready and willing to serve. This magical time will begin toward the end of January and becomes full blown by mid-February. The domestic queen is an induced ovulator, meaning, when copulation takes place the severe stimulation of the mating process causes the follicles to rupture. The eggs and estrogen are then released. Now, two

things are certain: she goes out of heat and there is guaranteed timing in which the sperm finds eggs. Thus begins 61 - 63 days of gestation.

So now let's look at the next season (spring, March 20th begins the gestation/delivery/nursing season). By this time all unsprayed queens are in various stages of the active breeding cycle. Early estrous queens who mated in January, will be delivering their litters starting in mid-March. This is followed by a crescendo of successful matings resulting in more and more females who will be delivering. There are those queens who were kept under house arrest and avoided the male encounter. However, felines not mated often restart estrous within a few weeks for round two. Whenever a queen mates, it is 61-63 days later that an average of 3 to 5 kittens are born. Then, 2 months (8-9 weeks) later the kittens are weaning and the caretaker may decide to keep them or try to re-home them. If unsuccessful, ultimately the heart wrenching decision is made to take them to the shelter. Shelters call May, June and July the *kitten tsunami* season as there are multiple litters arriving per day! Of course, while kittens are nursing and growing they are a delight to watch. Their placement after the two month post delivery now becomes an acute dilemma for shelters.

Days begin shortening on June 21st which is also the first day of summer and there are kittens and cats of all stages and all ages. Some queens will get pregnant a second time! With house arrest or just luck the first estrous will subside but if mating did not occur, the female's heat will restart and toms have had a second chance. If she appears out of heat it could well be she is actually pregnant in which case, of course, the queen will soon look pregnant (distended abdomen.)

The traditional calendar reports September 23rd as the beginning of fall season. Pretty much by the end of August cycling (periods of heat) has stopped. Closure proceeds normally for the development of the last of this past year's nursing and weaning. Thus, fall is a blessed period of general feline tranquility until the next winter breeding season begins. Kittens are growing and moms gain weight back.

So there's the basic outline of what and when the forces of nature make the queens (young and older) do what they do. Personal experiences may differ somewhat but this outline encompasses the vast majority of them. Some obvious factors may change some of the timing; e.g.; caretakers in the southerly states are going to recognize this pattern; northern states may find the seasons are shorter; whereas in Hawaii the season

is almost year round kitten time. Indoor cats with artificial lighting can have their heat cycles affected by their caretakers' personal use of lighting.

Armed with those time frames and the combination of age at a given season we know that young queens can come into estrous as early as 4 to 5 months and for sure by 6 months. This means *spay by 5 months* is good insurance against "oops" litters. A little thing like "I forgot to make an appointment" or simple procrastination can happen far too easily in our busy lives (see box September 23.)

What is absolute is that any of the female kittens born into any year's reproductive cycle will be more than ready to respond to nature's wake-up call by the winter's increasing daylight. There is plenty of evidence that unintended litters are born simply because the queens were not spayed. Don't let your charge be one who adds to the *kitten tsunami*.

The sheer number of veterinarians who do sterilize cats younger than 6 months and the reported ease of surgery, safety and rapid recovery makes *spay at 4 or 5 months of age* a sound practice. By performing surgery by 5 months and eliminating all of the "oops" litters, the overbirthing could theoretically be eliminated in one or two years. What a triumph that would be for all concerned.

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