

BREEDING BEHAVIOR OF FEMALE CATS

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First heat occurs at about 10 months of age (4 months is the earliest recorded) although females do not technically reach puberty until 15 months. Most owners defer breeding their queens until they are 1-1½ years old. Queens are in their sexual prime when 2-8 years old; they rarely produce young after age 14, and many cease earlier, although some continue past 20. The cat is polyestrous, with cycles occurring during late spring and early fall, followed by anestrus periods lasting up to 5 months—although this varies with geographic location and the individual. In the presence of a male, estrus lasts about 4 days, 9-10 days if a male is not present, and recurs at intervals of 15-21 days. Estrus activity includes playful rolling and excessive rubbing and a curious low call 2-3 days before estrus; this activity is exaggerated in the Siamese and many mistaken diagnoses of nymphomania have been made. In the “estrous crouch” the hind-quarters are elevated and the cat makes treading movements with the limbs.

Vaginal smears during anestrus reveal small, nucleated epithelial cells of varying size, shape and affinity for stains. In proestrus the cells become more numerous and greatly flattened. During estrus the epithelial cells are large, non-nucleated and cornified. During metestrus

strus cornified cells are found until 3 days after copulation, when large masses of leukocytes appear. In early pregnancy, nucleated epithelial cells with large vacuoles are diagnostic, and after implantation the smear gradually comes to resemble that of proestrus but with a few leukocytes present. Ovulation is not spontaneous but occurs 24-27 hours after copulation (or a comparable artificial stimulus). Fertilization takes place during the first half of the 2nd day after mating, and implantation occurs 2 weeks later. Gestation lasts 62-69 days (65-69 days in Siamese, and their kittens mature more slowly and show first estrus later than other breeds). Litter size is smaller in young and old females, the average being 4, and more than 8 kittens cannot be nursed as successfully as fewer.

Abortions are more common in cats than in dogs and are seldom observed before 4-5 weeks of gestation; they are more common in short-haired than long-haired breeds, and most are the result of uterine infections with coliforms, staphylacocci and streptococci. Abortions have been reported during attacks of pneumonitis and panleukopenia. Superfetation, i.e., fertilization following ovulation during gestation, is known to occur; heat may be induced during midgestation by giving injections of estrogens, without causing abortion. Pseudopregnancy occurs after any nonfertile mating; it lasts 30-40 days and estrus occurs by 7 days later. Anastomosis of the placentae occurs, but fremartins do not result.