

ACBA: Husbandry

CAVY BREEDING OVERVIEW

By David Hardesty

The age at which sexual maturity is reached in the cavy varies with the sexes. Sexual maturity in the female cavy may be reached as early as 4-5 weeks, and it has been reported that many young cavies were mated by their sires before weaning at 33 days of age. Males are slower to reach maturity and although they demonstrate sexual activity at an early age, fertile matings are unusual before 8-10 weeks of age.

Cavies are best mated when they are approximately 2.5 to 3 months old or when they weigh 22 to 28 ounces, whichever comes first. If the female is bred before 6 months of age, there is less likelihood of the animal becoming excessively fat. Also, there is a danger associated with breeding the female cavy after six months of age. For normal delivery in the cavy the bones which comprise the pelvic girdle, properly called the symphysis pubic, must separate approximately the width of the index finger to permit passage of the fetus. If a sow is bred after six months of age these bones may fuse, which will not prevent the sow from breeding but will prevent the sow from delivering the fetus with a loss of both sow and babies.

Unless interrupted by pregnancy, an average sow comes into heat every 13-20 days. The average interval between ovulation in unmated females is about 16 days. The fetuses are carried for a term of 59-72 days, with the average term of 63 days. Within 2-3 hours after giving birth, the female guinea pig will go into heat and ovulate. Therefore if the female cavy is permitted to deliver her babies together with a sexually active male, then she will breed back to the male immediately after birth. This is referred to as postparturition breeding.

The average litter size is 3-4 babies with the young being born fully furred, their eyes open, and with a complete set teeth. Generally the length of pregnancy decreases as the litter size increases. Also the weight of the baby at birth decreases as the litter size increases. The litter will nurse for approximately three weeks, depending upon the size of the litter. Because the female has only two functional teats, the ideal litter size would be two. This would mean no waiting line to nurse. Not so with larger litters.

Most female cavies will readily accept foster pups, and will continue to nurse foster litters as long as they are asked to nurse litters of pups which are small

and of similar weight. Care should always be taken to inspect the teats of a nursing sow to guard against the teats becoming infected, or raw from excessive nursing. Because the teats will come in contact with the bedding material, the bedding should be changed more often to prevent bacteria from invading the teats as they come in contact with dirty shavings.

The average breeding life of a sow is three to four years, depending upon how frequently she is bred, and how fat she is allowed to become. Sows which are bred constantly or very little will not have a long reproductive life. Sows which become fat due to lack of exercise will often go sterile due to fat deposits which will mechanically block the oviducts. Fat males will go sterile from fat deposits which will build up around the testicles causing increased heat exposure to the sperm in the testicles, which will result in sperm which is not reproductively viable.

With the desire to produce offspring which have desired physical characteristics, i.e. come up to the Standard of Perfection, there are commonly used breeding programs utilized to achieve these results. One method of breeding is referred to a line breeding. In this method a stud male, which possesses superior physical characteristics, is initially bred to non-related females which also possess superior physical characteristics. The female offspring of these crossings will be bred back to their sire. The granddaughters of this sire will be bred back to the sire, etc. Eventually a new line may be started utilizing a superior male offspring from the original stud. It is believed that a sire will pass his best characteristics to his female offspring. Hence the rationalization of breeding the stud boar back to his female offspring.

Another method is referred to a Selective In-breeding. This method of breeding says that not only the best of the males characteristics are passed to his female offspring, but that the best of the mothers traits are passed to her male offspring. Therefore with Selective In-breeding daughters will be bred back to their fathers, as in Line-breeding, but mothers will be bred to their sons. The idea is that when an offspring is produced which is better than the parent of the same sex, the offspring will replace that parent as the active breeder. The intent, therefore, is always to produce an offspring to replace its parent as the breeder.

Care should always be taken to employ the strictest rules to eliminate those offspring which have even the slightest setbacks as they are maturing. This desirable result of these methods of breeding will be to concentrate the best of both parents into the offspring, but the undesirable result may be that the worst of both parents may be concentrated into the offspring. Therefore offspring which are not healthy or prosper should be culled. Records should be kept

to detail problems which have arisen within a bloodline. This will prove valuable information for determining if a problem associated with the bloodline is being locked into the bloodline by the inbreeding program. The best and quickest way to determine the depth of a bloodline is to do a brother x sister cross. If there are hidden problems within the bloodline they will certainly surface.

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