

TOMCAT SPRAYING

Q.: How do tomcats spray, and what is the source of the characteristic odor of this urine?—M., Virginia.

A.: The answer to this question must be somewhat speculative. Most psychologists and others studying behavior attribute the act of spraying in male cats to the function of "territorial marking." From observation, however, it appears that tomcats will often spray as the result of psychic disturbances, and particularly when frustrated. This is a willful and voluntary act. It is normally done in the standing position with the tail erect, although some animals will assume something of a praying position. The urine is not "sprayed" in a fine mist as many believe, but is ejected in a forceful short stream aimed in a particular direction. This is often seen in caged, large cats in zoos. Apparently, abdominal press in coordination with bladder contraction produces the sharp rapid spurt of urine.

As to the strong characteristic odor of tomcat urine, no one seems to have precise scientific information. It seems that the anal sacs or accessory sex organs are not the source of the odor because urine drawn directly from the bladder has the characteristic odor even though it has not passed through the area of the accessory organs. As the characteristic odor is lost after castration has been performed, it seems logical to believe that orchic substances, probably testosterone, are involved. The characteristic odor may be a breakdown product of testosterone itself, a linkage of testosterone to other substances, or a product of organic substances under the influence of testosterone. Cats castrated late in life may continue to spray in the characteristic manner, so it is believed to be a learned habit. The urine, however, no longer has the odor of the noncastrate.—J. E. Whitehead, VMD, ASPCA Hospital and Clinic, New York City.