

EFFECTIVENESS OF GONACON IN COLONY-HOUSED FEMALE CATS

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Humane management of free-roaming cat (FRC) populations is a goal which impacts both public health and animal welfare. Long-acting injectable immunocontraceptives are worth evaluating in such populations as management tools due on their potential cost savings (compared to spay/neuter), lack of surgical risk, potential ease of application in the field, and possible effectiveness in both male and female cats. A GnRH vaccine, GonaCon, developed by USDA Wildlife Services, National Wildlife Research Center (NWRC) for white tailed deer was identified as a potential candidate for testing in cats based on documented success in a number of species as well as effectiveness in laboratory-raised female and male cats (Levy, 2011; Levy 2004). A preliminary 4 month study evaluating a single intramuscular dose of GonaCon in six purpose-bred spayed adult female cats resulted in serum antibodies in 6/6 (100%) against GnRH by ELISA and transient site reactions in 4/6 (66%). A second study evaluating the effectiveness of a single injection in a diverse group of 38 queens housed with seven males under colony conditions yielded variable results. All control queens 10/10 (100%) became pregnant while 12/20 (60%) of vaccinates became pregnant within 4 months. Two additional vaccinates become pregnant within 1 year 14/20 (70%). Injection site reactions were observed in 9/20 (45%) of vaccinates. Average fetal counts were lower and median time to conception longer in vaccinates compared to controls. The level of contraception induced by this dose (0.5 ml) and vaccine lot was not sufficiently effective. Hypotheses as to why these results varied from previous data sets will be presented.