Fertility Control Using Intrauterine Devices: An Alternative for Population Control in Wild Horses

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Abstract

The purpose of this study was to develop a contraceptive method for feral horses. The feral horse population has increased significantly in recent years despite attempts to control numbers. As in most wild animal population control programs, contraceptive methods must be easy to apply, cause minimal disruption to the social structure and be fully reversible. In the present study, we tested the effectiveness of an intrauterine device (IUD) for fertility control in mares. Six mares were fitted with a silastic O-ring-shaped IUD on July 1 of Year 1. The IUD-treated mares were turned out with 12 nontreated mares and a fertile stallion in a large pasture until October 20 (112 d). None of the IUD-treated mares and all the nontreated mares became pregnant. The IUD-treated mares were maintained separately from the stallion during the winter. Following removal of the IUD on April 27 of Year 2, the mares were again introduced to the pasture with the stallion together with 6 nontreated mares. For the 6 mares previously treated with an IUD, the mean interval from introduction to the stallion to conception was 17.5 +/- 5 d or 1.3 cycles per pregnancy, and all mares produced a normal foal at term. Subsequently, 19 recorded mare breeding seasons resulted in 18 foals. Uterine cytology and histopathology indicate that the IUD causes mild chronic endometritis without permanent changes in the endometrium. We conclude that based on our observations, the O-ring-shaped IUD is an effective, safe and practical contraceptive method for mares.