Fertility control for wildlife management: Development of new tools and regulatory issues

Eckery, D., Mora, D., Mauldin, R., Ruell, E., O'Hare, J., and Eisemann, J.
USDA, National Wildlife Research Center, 4101 LaPorte Ave., Fort Collins, CO 80521

CONTACT: Douglas Eckery, *douglas.c.eckery@aphis.usda.gov*

Effective management of wildlife and pest species is becoming increasingly necessary throughout the world. At present, some of the most effective methods of wildlife population control are achieved through the use of increasingly controversial lethal methods, including poisons that are also becoming more highly regulated. The use of fertility control as a tool to aid in wildlife management strategies is considered to have numerous benefits and has attracted substantial attention. The greatest benefits from the use of wildlife fertility control will be realized when it is used in conjunction with other tools in integrated management programs. The challenges associated with the use of fertility control in wildlife are not only technical in nature, but also involve regulatory, social, political and cultural aspects.

In the United States, there are two different contraceptive vaccines (ZonaStat-H and GonaCon) and two other compounds (OvoControl® P and ContraPest®) that are registered for use in wildlife populations. Both vaccines have been shown to be effective in suppressing fertility in individual animals of a number of species, and have also been used successfully for the management of isolated populations of deer, horses and goats. While the use of these vaccines and other methods of fertility control has provided important evidence in support of this approach for wildlife management, it has also highlighted the need for improved methods that cause long-term infertility or permanent sterility, and the need for more effective methods of delivery.

Fertility control products used on wildlife are classified as either a new animal drug, a veterinary biological product, or a pesticide under federal law, and are regulated by one or more federal agencies, even during the research and development stage. Which federal agency has primary authority over the distribution, sale, and use of a product under which federal laws, depends on multiple factors, including its intended function, mechanism of action, and the circumstances of the target species or population. Consultation with the appropriate regulatory agency early in the research and development phase helps to ensure that resources are spent on activities that satisfy agency-specific data requirements for product registration, approval and licensing.