Written evidence submitted by Sharon N

Only non-lethal methods should be used to control invasive species of animals. Fertility control is widely advocated as a safe, effective and publicly supported alternative to lethal control. Single-dose injectable immunocontraceptives, based on vaccines that generate an immune response to proteins essential for reproduction, are increasingly used for wildlife management. For instance, a single dose of the injectable immunocontraceptive vaccine GonaCon, which targets the gonadotropin releasing hormone (GnRH), can induce infertility (in both sexes) for several years in many wildlife species.

In contexts where capture, injection and release are not feasible or economically viable, the availability of oral contraceptives would multiply the breadth of field applications, particularly as species-specific oral delivery systems already exist for some potential target species.

Defra-funded projects demonstrated that a novel GnRH-based compound, tested as an oral contraceptive vaccine, generated an immune response in laboratory rats and reduced fertility in some animals. This was the world’s first ever demonstration that an animal’s immune system can be triggered by oral administration of an immunocontraceptive vaccine.

July 2019