

Assateague Island Mares 'Shot' With Contraceptives

In January 1994, Assateague Island NS staff met with Dr. Brian Underwood, NBS, to discuss the application of a draft population dynamics computer model for the feral horses. Population projections are based on known historic genealogy, fecundity, mortality, and density-dependent birth and survival correlations. Preliminary model simulations which factored in modest natural mortality indicated a continued rise in the population over the next decade. An environmental assessment was prepared to assess feral horse management alternatives for 1994.

The approved alternative was to treat all mares with a single dose of immuno-contraception for one year in order to suppress population growth in 1995. Thanks to a combination of good luck and good shooting, the goal of 76 adult mares was achieved in 15 actual field days of darting. For 28 of these mares which have been a part of the ongoing immuno-contraception research, this shot should provide near 100 percent effectiveness. Past research indicates that the initial dose could provide contraceptive effectiveness of up to 70 percent for the remaining mares. Park staff expects 27 births in 1994 and 10 births in 1995. According to the population model, the 1994 treatment appears to at least stabilize the present population. The treatment also conditions all reproductive age mares for the future use of immuno-contraceptives.

The Delaware Water Gap NRA, Upper Delaware Scenic and Recreational River, and Delaware River Basin Commission recently sponsored an Upper Delaware Water Quality and Biological Monitoring Conference that included participation by 51 individuals from 23 agencies and citizen volunteer groups. A similar workshop was held in 1987. Seventeen agencies and organizations are actively involved in monitoring water quality in the region; a representative from each described their monitoring activities. Discussions focussed on macroinvertebrate monitoring methods and experiences. As a first step towards interagency standardization of methods, technical representatives of the agencies agreed to meet later in a field session.