

Since the early 1900s, White-tailed Deer (*Odocoileus virginianus*) populations in the Eastern United States have been steadily growing (Storm et al. 1995). As deer populations in New Jersey continue to rise, the amount of undeveloped land available to them is decreasing. White-tailed Deer are extremely adaptable creatures and have learned to live in the urban sprawl setting which encompasses much of New Jersey; many becoming “fringe-feeders,” grazing on grassy areas along the edges of forests and wandering into neighborhood backyards and farms. Over the past fifty years deer have become a pest species in New Jersey, negatively impacting forest regeneration and crop yields (Storm et al. 1995). They have also become a nuisance to home owners and other businesses as they “raid” small gardens and flower beds. Urban sprawl has also led to an increasing number of deer/car collisions as roads become progressively more difficult for deer to avoid. New Jersey’s response to the “deer problem” has been to regulate the population by issuing hunting permits and producing an annual Game Code (NJDEP, 2005).

Hunting deer reduces the population and also provides revenue within the state as deer hunters are estimated to spend over 100 million dollars each year (NJDEP, 2005). Over 2.7 million pounds of venison are harvested each year for consumption (NJDEP, 2005); non-profit organizations also allow hunters to donate venison to food banks (NJDEP, 2005). Increasing development, however, limits the areas in which hunting is safe and permissible. The hunting of bucks primarily does little to decrease population as the females affect the population more greatly. Trophy hunters (a significant portion of deer hunters) are primarily concerned with the size of the deer and its antlers and are killing off the best of the herd and thus contributing to a decline in its health and overall stamina.

Another option available for deer population control, implemented in parts of New Jersey, is the use of birth control (Wildlife Services, 2005). Immunocontraceptive vaccines are available in multi-year vaccinations which are given to female animals after being captured

(Wildlife Services, 2005). Scientists are also developing an oral contraceptive for animals in the form of food that only the target species would be attracted to (Wildlife Services, 2005). This method of population control is useful in areas where there is too much human congestion for hunting to take place. Drawbacks of the vaccination method include having to capture each female deer which can be time and resource consuming. Oral contraceptives present the problem of effecting other animal populations that may be attracted to it.

No regulation is also an option. The state spends significant amounts of money enforcing hunting regulations and would spend even more administering birth control to deer populations. Car collisions and disease would serve to control the population. However, ruminant diseases such as epizootic hemorrhagic disease have the potential to spread to other animals, including domestic pets and farm animals (MDNR, 2006). As populations increase, deer will come in increasing contact with other animals and the potential to spread disease will increase. Increased car collisions would also pose a safety issue.

Considering the increasing human population and the decreasing amount of space available to hunt safely, contraceptives may be the most sensible option. Hunting is only a solution in heavily wooded areas and those are not the areas where deer are nuisances. While doing nothing would not have any immediate negative effects, the future problems are unforeseeable; it is best not to wait until the population is beyond simple regulation. Contraceptive control will negatively impact those in businesses reliant on hunting but it will open up jobs in wildlife management; it will also allow experts to select which animals will breed, ensuring a healthier population, whereas hunting generally selects for the weaker individuals.

Works Cited

- Division of Fish and Wildlife. 2006. *New Jersey Department of Environmental Protection*; available from <http://www.state.nj.us/dep/fgw>; Internet; accessed 02/18/06.
- “Epizootic Hemorrhagic Disease (EHD).” 2006. *Michigan Department of Natural Resources*; available from http://www.michigan.gov/dnr/0,1607,7-153-10370_12150_12220-26647--,00.html; Internet; accessed 02/15/06.
- “GonaCon – Birth Control for Deer.” 2005. Wildlife Services. *Animals and Plant Health Inspection Service*; available from http://www.aphis.usda.gov/lpa/pubs/fsheet_faq_notice/faq_wsgonacondeer.html; Internet; accessed 02/16/06.
- Storm, Gerald L., and William L. Palmer. “White-tailed Deer in the Northeast.” 1995. *U.S. Department of the Interior National Biological Service*; available from <http://biology.usgs.gov/s+t/noframe/c282.htm>; Internet; accessed 02/15/06.