



THE LEAGUE OF HUMANE VOTERS® *of New Jersey*

POLITICAL ACTION FOR ANIMALS

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Deer Breeding Ecology and Solutions

The white-tailed deer is a keystone herbivore that has co-evolved with forests for 3.4-3.9 million years. Deer are an important factor in creating and sustaining natural diversity (Smithsonian). And while deer, along with other species, especially birds, may help spread certain human-introduced invasives as the animals' antagonists claim, the white-tail is an important vector in seed dispersal for native plants.

The purpose of any bona fide humane deer program should be a reduction in deer breeding rates. Hunting and other forms of killing increase reproduction.

Lethal action – recreational shooting, marksmen. Hunting sets in motion a cascade of events that ensnares townships in perpetual killing programs. Not least of these is higher reproduction, better neonatal health and a changed age structure. A single example of many: Lewis Morris Park has been killing deer since 1996. After 13 years, the park had more deer per square mile in 2009 (65) than in 1996 (63), when the killing began. In the 17th year of a 5-year plan, Princeton had similar issues. <http://tinyurl.com/PrincetonHunt2014>

In each case, in dozens of instances, humane organizations, not hunt activists, are proved correct: hunted deer birth rates boomed. The claim that if it hadn't been for killing, there would have been more deer, a Malthusian explosion, isn't correct. Comparisons of hunted versus non-hunted sites show fewer fawns per does and later breeding.

Hunting is clearly ineffective. It increases birth rates, or keeps rates high where habitat is optimal. Assessments, show marginal if any improvement in woodland vegetation, even after dozens of years of hunting. Bow hunting is ineffective and inflicts high wounding rates. Deer die from massive hemorrhage or infection. Having increased reproduction, hunt promoters who has initially promised "5 year" programs switched lanes and started talking about "maintenance," or perpetual hunts. That's where we are today.

Can the damage done by faulty policies be corrected?

Practices that stimulate deer fertility should be gradually abandoned (see below). Habitat management for sport hunting is predicated on white-tailed deer breeding ecology: hunting itself is used to increase deer for more hunting. Scientists uniformly report that well-fed does breed earlier, and bear more fawns. (Abler et al, J. Wildl. Manage, 40 (3): 1976) In natural (unhunted) populations, birth and death rates reach a balance, so that the net rate of increase becomes zero and the populations numbers stabilize at some equilibrium level (Putman 1989).

In response to killing programs, does increase their home range by an average of 30% (Henderson, Warren et al 2000). If deer are suddenly seeking refuge within town borders or in your neighborhood or park, the culprit may be nearby areas where shooting (permit, depredation, etc.) and baiting, or the more silent baiting and bow hunting, are taking place. Some of these activities, especially if done on "conservation" land or farms or in backyards, are secretive; begin by asking your township if any "deer management" activities occur in your area.

Unfortunately, the ecologically detrimental practice of baiting is now everywhere – in forests and backyards. In 2010, the firearms lobby in New Jersey, assisted by partner New Jersey Audubon (see [Teaming with Wildlife](#)), slashed bow hunting

safety buffer for homes from 400 to 150 feet. It is important to step away from immediate environs to better assess where the white-tail is pushed and pulled, by hunting, by habitat enhancement, and by conservation politics. Pull out a county map. A hunt in one park or golf course causes deer to flee to another, or to fan out in protected adjacent neighborhoods. Note the hunted areas and the progression of hunts from one park to another.

In the absence of hunting, birth rates decline. In areas where managers halt habitat development, the result is fewer deer. White-tailed deer on poorer range show ovulation rates 67% of those attained by deer on good range (Julander et al 1961).

Solutions

1. Gradually stop all of the early successional habitat management programs that provide ideal breeding range for deer (prescribed burns, clear-cutting, and the planting of various agricultural crops favored by deer). Habitat management can increase the deer carrying capacity by increasing the quality and quantity of food available.
2. Ban deer baiting in affected townships and encourage legislators to enact legislation that bans the practice statewide. Baiting contributes to forest degeneration by concentrating deer, who in turn feed on natural vegetation, and small predators, who prey upon ground nesting birds. Baiting spreads invasive and exotic seeds. Baiting lures deer to baited areas, causes auto-deer collisions, and increases deer reproduction. Enact local ordinances that prevent deer feeding.
3. End practices that cause deer to leave their home range. Deer leave their home range when:
 - a. There are too many invasive plants. Develop a plan to reduce or eliminate invasives. Mechanical removal and/or re-introduction of native species. Ban the sale of invasive species at local nurseries.
 - b. When hunted. Female deer expand their range by 30%.
 - c. Pushed out by development.
4. Electric fencing is effective and most kits are inexpensive.
5. Other fencing is also effective. In the following study, it showed that six foot woven wire, was the most consistently effective design for deterring deer throughout the study, with zero failures:
store.msuxextension.org/publications/OutdoorsEnvironmentandWildlife/4603.pdf
6. Homeowner education. Deer repellents and deer resistant plants.
www.deerfriendly.com/deer/new-jersey/new-jersey-deer-resistant-plants-and-repellents
<http://njaes.rutgers.edu/deerresistance/>

White-tailed deer are pushed to artificial abundance. Given proper steps to undo the damage, deer will not require substantial intervention. Given the intensity of what has occurred, and is still occurring, however, the species may require assistance. Given the location, contraception may fit that bill. It cannot be recommended across the board and it is important to have an expert assess whether it would be useful in any given situation.

7. Fertility control: Lowers fertility rate, highly effective, and available. www.lohvnj.org/DeerFertilityControl.pdf
8. Non-Lethal Deer Population Control for Urban and Suburban Environments: <http://www.deerfriendly.com/deer-population-control>
9. Surgical Sterilization. Lowers fertility rate, highly effective, and even low numbers of sterilized does lead to success. Current projects: www.cliftondeer.org, www.tinyurl.com/VillageEastHampton, www.wildliferescueinc.org, <https://www.nytimes.com/2017/09/22/nyregion/deer-vasectomies-staten-island.html>

Hunting programs, billed as cheaper because hunters volunteer, can run into hundreds of thousands of dollars for towns. In Essex County, it's cost the county about 1.7 million for police overtime and printing since 2008.

Finally, be aware of political partnerships and alliances. Generally, conservation organizations are teamed with hunting manufacturers and interests under various partnerships and Teaming with Wildlife. The sport shooting industry vociferously opposes contraception and has blocked delivery systems, such as darting, that would make the contraception more affordable and easy to administer. Rather than seek darting, the conservations groups are careful to toe the sport hunting line.