

## Deer Damage Management Webinar Questions

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### Resources:

1. Managing Deer in Suburban Environments: A Technical Guide ([Deer\\_management\\_mechs](#))
2. Deer Fact Sheet [Deer\\_factsheet](#)
3. Community-based Deer Management: A Practitioner's Guide ([Deer Practitioner Guide](#))
4. Community Deer Advisor Information <https://deeradvisor.dnr.cornell.edu/>

#### 1. Any guidance on electric fences?

Electric fences work best in small areas such as home gardens. In crop settings, electric fences tend to fail on fields larger than about 5 acres. Baited electric fences work better than electric fences alone. Peanut butter can be used as an attractant on fences (gets the deer to touch the fence first with its nose or tongue to maximize the shock). Or cloth strips can be hung on the electric fence about 5 feet apart and sprayed with an egg-based deer repellent. A high-voltage charger (7,000+ line volts) designed for deer control works best.

**See:** Curtis, P. D., M. J. Fargione, and M. E. Richmond. 1994. Preventing deer damage with barrier, electrical, and behavioral fencing systems. *Proceedings Vertebrate Pest Conference* 16:223-227.

#### 2. Our local gardeners find that motion activated water sprays seem to repel the deer. Can you comment on the effectiveness of that.

The water sprays are annoying and initially surprising, but deer learn that they don't result in any real danger. Deer often habituate to these scaring devices after a few days. If there is something that deer really want to eat, they will get wet. Also, these spray devices won't work during the winter months with freezing temperatures.

#### 3. What type of wood chips for borders?

Type of wood does not matter. However, it's better to use larger chunks or chips of wood rather than shredded or fine wood mulch. Voles will form runways in shredded wood or fine mulch and may damage woody ornamentals. Coarse wood chunks won't hold the vole tunnel structure.

#### 4. How can I determine deer density by me?

There is no easy way to determine deer density. Reliable estimates require ear-tagged deer and recapture data from camera surveys. Those data are run through computer models based on survival and mortality to get population estimates with reliable confidence intervals. As I have done this modeling work in several communities, I can often get a rough estimate of deer

abundance based on damage that I see on woody ornamentals. But actual abundance metrics would cost thousands of dollars to obtain.

**See:** Curtis, P. D., B. Boldgiv, P. M. Mattison, and J. R. Boulanger. 2009. Estimating deer abundance in suburban areas with infrared-triggered cameras. *Human-Wildlife Conflicts* 3(1):116-128.

**5. Are there ways to change deer habits, for example changing their daily routes/paths through my yard.**

The only reliable way to change deer travel patterns is to fence them out of areas. Having a large dog within an invisible fence system may work, but the dog would need to spend most of its time outdoors.

**6. How to petition state wildlife regulators to make changes in harvest limits/types.**

Community leaders and elected officials should contact state wildlife agency staff. The name of the agency will vary by state (e.g., Pennsylvania Game Commission, NYS Department of Environmental Conservation, NJ Department of Environmental Protection, etc.). Look online to find regional offices and contact information. Report the types of deer problems you are experiencing. Many states have specialized urban deer management programs.

**7. Some of the listed plants are highly invasive. E.g., Italian arum.**

That is true, so one would want to avoid planting invasive plants. At the time we conducted the bulb field trials a couple of decades ago, these bulbs were readily available and being sold commercially. Our horticulture specialist selected the bulbs to test and provided greenhouse space for the potted plants.

**8. Are there non-lethal physical deterrents that can be possibly used in a suburban setting, like a paintball gun, throwing rocks, rubber bullets, beanbag launcher etc.?**

Much will depend on how “discharge” is defined in your local laws and regulations (e.g., speed and type of projectile). Definitely, you could yell and throw rocks, but deer may be active much of the night, and this would be exhausting. Anything that requires someone to be present (e.g., paintball gun) would likely require more time and effort than people have available.

**9. I wish we could figure out a way to get EPA to deal with repellents - any ideas?**

That will be a struggle at the federal level given the staff reductions many agencies are currently experiencing. Bringing a new active ingredient to the market could cost hundreds of thousands of dollars for required EPA testing and labeling. Try contacting elected officials in your area.

**10. What are typical deer populations for different natural environments where housing developments are expanding?**

Suburban deer densities vary dramatically depending on many factors. For example, housing density and size of lots are important. Are backyards connected by wooded strips that provide cover and travel lanes for deer? How old is the development, and are there mature trees and shrubs available for forage and cover? How severe are winters (snow depth) in the area where you live? My experience has been that where suitable cover exists, deer densities may range between 30 and 150 deer per square mile. I have seen really high density areas in southeastern NYS and NJ with densities exceeding 200 deer per square mile.

**11. How to explore repellents more closely to make sure they are tested before I use them?**

Do a Google Scholar search of the repellent name and active ingredient; for example "deer+repellent+capsaicin." I got the following articles quickly.

[Effectiveness of capsaicin and bitrex repellents for deterring browsing by captive mule deer](#)

[Comparison of active ingredients and delivery systems in deer repellents](#)

[Comparing the efficacy of delivery systems and active ingredients of deer repellents](#)

[Evaluation of Hot Sauce® as a repellent for forest mammals](#)