Minimizing Deer Damage in Vegetable Crops

Julie Kikkert, Cornell Vegetable Program, 7/31/13

Mouthfuls of carrots being pulled up and chomped by deer in a local field this week (photo) inspired me to put together some resources for managing these pesky critters. A comprehensive plan is needed to manage deer on your farm. Understanding the biology, habitat and feeding habits is a good first step. See the fact sheets listed in the resource section below. Your management plan will depend on the size of the farm or field you wish to protect, your location, tolerance for damage and the resources you have to direct towards this project. Here are some of the options:

EXCLUSION
To deter deer during the vegetable growing season, single-strand electric fences can be used in combination with a repellent. Alternatively, pieces of aluminum foil with peanut butter when placed at three to four foot intervals along the fence attract the deer to touch the electric fence (photo). High-visibility, electric polytape fences on fiberglass stakes provide another low-cost, portable design that can effectively reduce deer damage to vegetable crops. The fact sheets listed below provide detailed information on these and other types of fencing.

SCARE DEVICES
The key to using these devices is to move them every day if possible. Look to see where the deer are coming into the field and seek to break their habit of coming there. CVP specialist Robert Hadad has had good success with Rubber Coyotes on his property (photo). The cost is about $55 each, and he used a total of 4 decoys for a 2 acre field. Other devices include scare balloons, scarecrows, noise cannons and the like. Deer become habituated to these devices in a few days.
REPELLENTS
One local grower reports success in using highly fragrant deodorant soap in combination with the electric fence. A variety of chemical repellents are labeled for use in New York. The repellents work best when deer pressure is light, however, some damage must be tolerated. Repellents should be applied before feeding is likely to occur. Repellents are cost-effective on small acreages. They may need to be reapplied every 3-4 weeks. Costs may be reduced by mixing with other crop protectants (make sure to read the label first).

BUFFER STRIPS
Deer prefer certain types of crops such as snap beans, dry beans and soybeans. Planting a buffer strip of such crops may limit feeding to those crops, and keep the deer out of your other vegetables.

POPULATION CONTROL
Managing deer population will go a long way towards minimizing damage to vegetables and other crops. Techniques include habitat management and hunting. Contraceptive methods are costly and the effectiveness on population reduction is controversial. The NYS DEC will help landowners with a management plan. The Deer Management Assistance Program (DMAP) seeks to help landowners implement site specific deer management on their lands. Under the program, the DEC issues a special permit and a determined number of deer tags to a landowner or resource manager, or a group of landowners or resource managers, whose property is in need of site specific deer management efforts. DMAP permits are valid for use only during the open deer hunting seasons and can only be used by licensed hunters. For many, this is the "right" time to harvest deer. Only deer without antlers or having antlers measuring less than three inches in length may be taken under the authority of a DMAP permit. Applications for permits valid during the fall big game hunting seasons must be postmarked by September 1. More information on the DMAP program can be obtained at http://www.dec.ny.gov/animals/33973.html or by calling your local DEC office.

RESOURCES
Cornell Vegetable Guidelines Chapter 5, page 28 of 2013 Guidelines
http://veg-guidelines.cce.cornell.edu/5frameset.html

Cornell White Tailed Deer Management Fact Sheet:

Prevention and Control of Wildlife Damage — 1994: Deer

New York’s Deer Management Program
http://www.dec.ny.gov/animals/7211.html