



Afoot in the Field

RESOURCE FOR CONSERVATION LANDOWNERS



HERD OF DEER ON A CONSERVATION EASEMENT PROPERTY; GLADYS GIFFORD

I FREELY ADMIT (and my wife will corroborate) that I spend a ridiculous amount of time deer hunting – during bow season, regular gun season, late muzzleloader season, a special January season in Tompkins County, and during an extended special municipalities bow-hunting program.

Spending time sitting quietly in the woods is a great way to see not just deer, but all kinds of wildlife. It's been a thrill to see raccoons, coyotes, fishers, all kinds of birds, and even a pair of young bobcats! I am not a trophy hunter, although I've been fortunate to have a few big bucks with impressive antlers come within range. My primary motivation for deer hunting is to fill the freezer with venison, which our family eats year-round, prepared in a variety of ways.

Keeping deer numbers in check requires harvesting does, as sterilization and birth control programs have not been successful. It is critical for preventing an imbalance where excessive deer herbivory outstrips the carrying capacity of a forest. This results in the forest's inability to regenerate native trees and provide high-quality habitat for a multitude of other species. If you are not a hunter, consider taking up the pastime or allowing access to your property for hunting by others. You can also advocate for the state and municipalities to provide more deer hunting opportunities.

Chris Olney
Director of Stewardship



Negative Impacts of Deer



DEATH BY A MILLION BITES is how Dr. Bernd Blossey, a deer and invasive species expert at Cornell University, describes the negative impacts of excessive deer browsing on native vegetation. There are no longer checks and balances to the deer population from large predators. Today, humans are

the number one predator for deer through car collisions and hunting. The deer population has exceeded its carrying capacity as our gardens and agricultural fields support an overabundance of deer.



ECOLOGICAL HEALTH

Ecosystem services

Deer eat native tree saplings and native plants, decreasing native forest biodiversity, impeding forest regeneration, and reducing the capacity of the forest to provide ecosystem services such as carbon sequestration and air purification.



Wildlife

Over-browsing decreases the understory tree and shrub layer that many animals rely on for their habitat.

Invasive Species

The over-browsing of native forest plants creates an imbalance. The forest cannot regenerate fast enough and invasive species fill the void.

From top: Browse line on the edge of a forest; Chris Olney. Deer enclosure at Sweedler Preserve; Andy Zepp.

ECONOMIC IMPACT

Timber Value

Deer prefer to eat maple and oak saplings which are tree species that hold a lot of economic benefits such as timber value and maple syrup production.

Agricultural Crops

Deer eat most cash crops including corn, oats, apples, soybeans and many more. This causes significant damage to agricultural fields.

Landscaping

Deer do not discriminate when it comes to where your plants are located. They cause costly damage to landscaped suburban plants, shrubs, and trees.

HUMAN HEALTH & SAFETY

Car Collisions

According to Utah State University biologist Mike Conover, deer are responsible for 440 out of 458 Americans killed by wildlife in an average year.

Lyme Disease

Although deer do not directly infect humans with Lyme disease, they do serve as a host for black-legged ticks. Humans, mice, and many other mammals can also serve as hosts for the black-legged ticks that are frequently infected by Lyme disease.



CHRIS OLNEY

The Importance of Annual Monitoring

The FLLT is required to monitor each of our conservation easement properties annually. The FLLT has over 175 CE properties to visit, which means all year is monitoring season! Visits are scheduled around the same time each year to space out the visits. The purpose of the monitoring visit is to document changes. When monitoring property boundaries, the FLLT looks for possible neighbor encroachments and refreshes signage. When walking the interior of the property, we are looking for any new structures, invasive species, or other changes to the health of the property. If you have questions about the monitoring process or about your property, please email me.

haileynase@fllt.org

I'd love to chat!

Hailey Nase
Conservation
Easement
Steward



Expert Interview

DR. BERND BLOSSEY

Professor of Natural Resources and the Environment at Cornell University

Dr. Blossey researches the connection between invasive species, earthworms, and deer, and how they are negatively impacting our forests. In addition to working on Cornell properties to manage deer, Blossey is a hunter himself and has managed his own property with deer exclosures, restoration work, and hunting. Dr. Blossey works with municipalities to create deer management programs at the local level.

How did you get interested in researching the impacts of deer?

I started this work from a conservation perspective. We've messed up the environment and need to play a role in helping to fix it. Otherwise, we will not have landscapes that allow organisms to adapt to climate change. The deer overpopulation contributes to a huge degradation of our forests. We can't do conservation and protect these properties fully without deer management.



Dr. Bernd Blossey (right) with two undergrad students from Cornell; Bernd Blossey

How do deer impact native vegetation?

Deer eat native species, creating space for the invasive species to colonize. Invasive species like swallowwort, garlic mustard, and Japanese siltgrass take advantage of open space and thrive in disturbed land. Usually, the invasive species have more seeds and grow quicker.

Whereas the native species usually produce fewer seeds,

or the deer eat the seeds, and tend to grow slower. As the deer continue to eat the native plants the invasive species can outcompete and become the dominant vegetation.

What tips do you have for landowners who want to protect native vegetation from deer?

Deer fencing is simply the only way. Yet, it is not simple. Fencing can be very expensive and time consuming. If you can afford deer fencing to protect the trillium, orchids, and other deer candy, do it. I would recommend that you don't just fence around the patch but fence a large space (1/2 acre to 5 acres) to allow the plants to spread.

Are food plots for deer helpful or harmful?

If you want to attract deer, food plots are effective. If you want to improve forest health, creating deer food plots is counterproductive. Food plots increase deer density and create more damage to the surrounding area. The deer not only eat the corn or clover you planted but also everything else in the surrounding area.

What are your recommendations for the future of deer management?

Recreational hunting is important to continue but it is not enough to control the population. The only way to do this on a landscape scale is to promote hunting with economic benefits for hunters and allow regulated market hunting where hunters could sell venison to butchers. The Swiss have a very successful model; they first have the recreational hunting season. If the quota of deer during the season is not met then professional hunters are hired to decrease the herd.



From Top: Flags represent each browsed flowering Trillium; Bernd Blosssey. View from tree stand at a FLLT preserve; Chris Olney

Deer Management at Home

FOR MORE THAN 25 YEARS the Finger Lakes Land Trust has allowed hunting on many of its nature preserves to help manage the deer population. Hunters can receive permits to hunt on sections of FLLT preserves. New York State has also encouraged hunting by expanding deer hunting opportunities, seasons, and the types of permits available to hunters, landowners, and municipalities. As a landowner, you might consider hunting or allowing hunters onto your conservation easement property.



JEFF KATRIS



CHRIS RAY

BENEFITS OF ALLOWING HUNTING ON YOUR PROPERTY

Many hunters are looking for more properties to hunt. Hunters can provide numerous benefits to the landowner such as:

- **Deer management** – Decrease deer browsing.
- **Extra eyes on your property** – Hunters can alert you to changes.
- **Provide additional income** – Charge for hunting lease agreements.
- **Receive goods / services** – Work out a deal for firewood, venison, or property maintenance in return.

BEFORE YOU ALLOW HUNTING

Good communication is key when creating an agreement with a hunter. Make sure you cover the following:

- When and where on the property do you want to allow hunting?
- Can hunters place and leave tree stands, hunting blinds, etc.?
- If you charge or lease, are you covered by your insurance?
- There is more ecological benefit in harvesting does, than bucks. Ask hunters to fill doe tags, or take a certain number of does before ‘earning’ a buck.

LEARN MORE ABOUT HUNTING

If you are still unsure about allowing hunters on your property, or if you want to learn more about hunting yourself, check out:

- The National Deer Association's online courses.
- New York State Department of Environmental Conservation's Hunter Education Program to learn safety and the rules of hunting in New York.
- New York State Department of Environmental Conservation's Hunting & Trapping Regulations Guide provides all the hunting laws and regulations.

CREATE DEER ENCLOSURES

Large deer enclosures or small deer fencing can be great tools to protect areas of forest or specific plants from deer browsing. Learn more from:

- National Park Services – *Creating Effective Deer Enclosures*
- Northern Gardener – *Using 'Micro-Enclosures' to Deter Deer*
- Visit Cornell Botanic Gardens to see deer enclosures in action.



AMY OLNEY

Poblano, Garlic, Feta Venison Sausage

Makes 20 lb batch. Use 10 lbs ground venison + 10lbs ground pork shoulder (both coarse-ground).

Mix ground meat in a large pot thoroughly with:

- 15** heads of roasted garlic
- 12** roasted poblano peppers
- 40** oz feta cheese crumble
- 10** TB fresh oregano
- 2** cups fresh cilantro
- 10** TB kosher salt
- 6** TB black pepper
- 8** TB chili powder
- 8** TB cumin
- 4** TB paprika
- 10** TB lemon juice
- 10** TB red wine vinegar

Put mixture back through a meat grinder, with a medium-size grinding plate, and into sausage casings.

COOK & ENJOY!

When Should I Call FLLT?



Contact us anytime with questions about your conservation easement property. Some activities will require the FLLT's input or approval. It is always better to ask before starting your project! Specifically, please contact us...



Before **selling** your property



Before **building** on your property



Before **cutting trees** or harvesting timber



Anytime you have a **question** or are unsure what your conservation easement allows

You can call the FLLT office at (607) 275-9487, or email us:

Chris Olney, Director of Stewardship, chrisolney@flt.org

Hailey Nase, Conservation Easement Steward, haileynase@flt.org

Afoot in the Field is provided for landowners in the Finger Lakes region who own conservation easement properties or who are otherwise committed to land conservation and wildlife habitat protection.

The Finger Lakes Land Trust is a member supported non-profit conservation organization that works cooperatively with landowners and local communities to "conserve forever the lands and waters of the Finger Lakes region, ensuring scenic vistas, local foods, clean water, and wild places for everyone."



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