"In heavily populated areas, deer should be managed a part of an overall health emergency, not protected as an endangered natural resource. The well-being of humans must come first."

–Dr. John Rasweiler

# **An Exploding Health Crisis** ... and the Way to Solve It

The reduction of deer populations through a combination of recreational hunting (at times organized and guided by skilled experts), and humane professional harvesting is the best way for places like Southold to control its deer problem and subsequent health emergency, a conclusion drawn from a 2014 Cornell University deer-management study (bit.ly/deerCornell). A painless process of trapping or chemical immobilization of deer by darting, followed by euthanasia, are also options, but their most appropriate use is in populated areas where hunting is impossible.

#### The following approaches—either impractical, unaffordable or undesirable—simply do not work for the North Fork:

#### **Yard Spraying**

While acaricides can reduce tick populations, they also harm bees, butterflies, and other beneficial organisms. Realistically, we cannot spray the entire North Fork, and it takes only brief exposure to an untreated area to pick up ticks.

#### **Four-poster De-ticking Stations**

These devices reduce but do not eliminate ticks in their immediate vicinity. However, a reduction in the cases of tick-borne diseases in humans has not yet been demonstrated. Furthermore, four-posters are supposed to be deployed at a density of one station per 40-50 acres—impossible in the Town of Southold because of New York State restrictions that forbid deployment close to occupied buildings, playgrounds (unless fenced-in), or roads. Deployment on farms or in orchards would be incompatible with the new Federal Food Safety Modernization Act.

#### **Fertility Control**

Two different approaches, surgical sterilization and the administration of a contraceptive vaccine, have been tried on the Cornell campus and Fire Island but failed to reduce deer to environmentally acceptable levels. These approaches are not only impractical but also unaffordable. It costs a minimum of \$500 to capture and vaccinate—more than \$1,000 to sterilize—each deer. With the vaccine, recapture is necessary after a year (again, at high cost) for booster shots, and more than 90% of the herd must be treated within a threeyear period to significantly limit the birth of untreated young. Even if such fertility controls made sense, tick levels would remain intolerably high for years.

# 7 BIGGEST **MYTHS ABOUT DEER**

#### 1. Ticks would still be a problem, even if there were no deer.

Not true. Immature black-legged ticks feed on certain small mammals (e.g., white-footed mice), known as reservoir hosts, where the ticks become infected with the organism responsible for Lyme disease but cannot reach maturity. In contrast, deer serve as reproductive hosts, feeding many hundreds of ticks to adulthood after which they drop off to lay thousands of eggs—a multiplier effect that puts deer at the heart of our current epidemic.

#### 2. The deer were here first.

No. Historically deer and man have always co-existed. But as we continue to eliminate their natural predators while also providing an abundant supply of food, deer proliferate at the expense of our health, safety, and natural environment.

#### 3. Deer hunting is inhumane.

Professional deer management is far more humane than letting animals go blind from periocular tick infections or be killed (or maimed to die elsewhere) by vehicles.

#### 4. The deer population can be managed by recreational hunters alone.

Cornell studies show that about 66% of the deer population would have to be removed each year to reduce the herd to sustainable levels. At best, recreational hunters currently harvest less than 25% of the local herd

## **5.** Fertility control is the best option.

New York State bars sterilization or contraception as a deer-management tool except in studies leading to new scientific knowledge—a high bar to cross. (See "An Exploding Health Crisis" to learn more.)

#### **6.** We'd have fewer accidents if everyone drove slower.

Deer will jump into the paths of cars at any speed and without warning—especially dangerous at dusk and dawn—causing 25% of all road accidents in our town.

## 7. Nature will take care of the problem.

... but only when new predators, diseases, or starvation take their toll ... or if man resumes his historical role as primary predator.

# **MISSION**

North Fork Deer Alliance (NFDA) is dedicated to promoting the return of the local deer population to levels compatible with human health, the environment, and the economy.

#### BE PART OF THE SOLUTION

As much of the land in Southold Town is privately held, management by landowners is extremely important in reducing the local deer population. If you have a parcel that routinely hosts a number of deer and are interested in having an experienced hunter on your property, contact NFDA at northforkdeer@gmail.com.

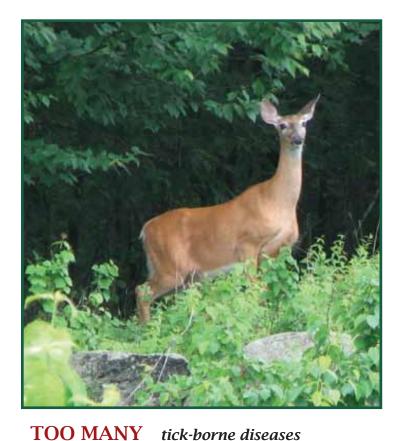
#### WE CAN HELP

We can connect you with skilled hunters who are local residents, as well as conservationists concerned with maintaining the balance of nature. These trained hunters all have valid New York State hunting licenses, have been vetted by an independent hunting organization, and will be overseen by a hunting manager. They are insured and will work with the property owners to meet their schedules. All hunting takes place between October 1 and January 31. In addition, New York State law provides substantial liability protection for landowners using licensed recreational hunters.

#### **CONTACT US**

EMAIL: northforkdeer@gmail.com FACEBOOK: facebook.com/northforkdeer WEBSITE: www.northforkdeer.org

# WE HAVE MANY DF.F.R!



**TOO MANY** auto accidents TOO MUCH economic devastation

TOO MUCH destruction of our forests **TOO MUCH** contamination of our waters



"In just the past few decades, for the first time since the last Ice Age, huge swaths of the whitetail's historic range have been put off-limits to hunting by deer's biggest predator. Man."

—Jim Sterba, author, Nature Wars

# Way Beyond Lyme\*

**Dr. John Rasweiler,** Cornell-trained reproductive physiologist, member of Suffolk County Tick Control Advisory Committee.

According to the CDC and New York State Department of Health, reported cases of tick-borne diseases—often difficult to treat and sometimes deadly—are higher on eastern Long Island than in other parts of the state and elsewhere in the U.S. The cause is clear: Ticks are hosted by an exploding population of deer, which changing land use has provided with abundant food while removing all natural predators. The state's Department of Environmental Conservation puts the current number of deer in Suffolk County between 25,000 and 35,000.



Deer with heavily tick-infested ears. (photo: Peter Priolo)

Although small mammals like white-footed mice, in their roles as reservoir hosts, can feed and infect immature ticks with diseases such as Lyme, they generally deny adult ticks the blood necessary to take them to their mature reproductive stage. Deer, though, do exactly the latter in their role as reproductive hosts. And Lyme is not the only thing to worry about: We are now at risk of contracting other tick transmitted diseases—e.g., anaplasmosis, babesiosis (the majority of cases in New York State are reported by Suffolk County), Borrelia miyamotoi, ehrlichiosis, and what's known as southern tick-associated rash illness, as well as a potentially fatal tick-triggered allergy to some red meat. Deer (not mice) are the reservoir hosts for the organism causing human monocytic ehrlichiosis, which can be a very dangerous disease. This organism is transmitted from the deer by lone star ticks (now extremely common in our area). Deer can support all stages of lone star tick development and are also the principal reproductive hosts for the adult ticks.

"Deer serve as reproductive hosts for ticks, feeding many hundreds of them to adulthood after which they drop off to lay thousands of eggs—a multiplier effect that puts deer at the heart of our current epidemic."

# Woodlands Are Being Decimated\*

**Bill Toedter,** former Executive Director of the North Fork Environmental Council.

On eastern Long Island, an out-of-control deer population has now destroyed nearly all of the tree seedlings, bushes, wildflowers, and ground cover plants—the understory—in our forests. In addition to stopping essential forest regeneration, many of our songbirds have fewer safe places to nest, feed, and escape from predators. Birds like the Eastern Towhee are denser on deer-free Plum Island than in deer-damaged environments of the North Fork. In many areas, the understory has been extensively replaced by harmful invasive plants such as wild garlic mustard, which is directly spread by deer, and mile-a-minute vine.



Healthy forest understory on Plum Island. (photo: John Rasweiler)



Deer-decimated understory in Ruth Oliva Preserve, East Marion, less than eight miles from Plum Island. (photo: Tom Rawinski)

# Our Waters Are Under Threat\*

**John Bredemeyer,** President of the Southold Town Trustees and Chairman of Southold Town Shellfish Advisory Committee.

Over-browsing of native vegetation by deer, as well as their trail damage to headlands and bluffs, have also dramatically increased soil erosion and water runoff on the East End. Recent studies by the Southold Town Shellfish Advisory Committee found elevated levels of fecal bacteria, originating from wildlife, in our waterways, sometimes rendering those waters unacceptable for shellfish harvesting and potentially unsafe for bathing.

# Cars + Deer = A Costly Combo\*

John Severini, Founder and CEO of GP Consulting and Environmentalist

The chance of hitting a deer in Southold is 3.5 times the national average, which translates into one deer collision annually for every 63 locally registered drivers. In 2015, the Southold Town Police Department logged almost 300 deervehicular collisions, accounting for about 25% of all accidents. (That number reflects an increase of almost 65% over the year 2000, when only 144 accidents were reported.) Says Southold Police Chief Martin Flatley: "In peak season, October through December, it's not uncommon to have two accidents reported in one eight-hour shift." In addition, figures on roadside carcass removal show that 30% of deervehicle collisions go unreported. Last year 388 deer carcasses were removed from Town roads. That venison, if harvested by hunters instead of cars, could be donated to food pantries instead of thrown into the town landfill.

#### **Deer Related Accidents Rise** in Southold Town (2000-2014)**Total Cost of** Deer-Related Vehicle Repairs \$7,000,000 \$5,898,565 \$6,000,000 \$4,910,822 \$5,000,000 \$4,000,000 \$3,039,717 \$3,000,000 \$2,000,000 \$1,000,000 2000-2004 2005-2009 2010-2014 Average Repair Cost \$2,977 \$3,473 \$3,935 No. of Accidents 1,021 1,414 1,499

All costs adjusted for inflation.

Sources: Southold Town Police Department; State Farm Insurance.

According to State Farm, if you carry liability-only auto insurance and hit a deer, you are responsible for the full amount of the repair charges. The average cost for such a strike in 2015 was \$4,135, which brought the annual bill for all Southold drivers to \$1,604,380.

# Venison, a Community Service

During hunting season, the Town of Southold provides a drop-off center for harvested deer, with the processed venison (30,000 pounds since 2008) donated to food pantries.



The lady's slipper orchid once flourished on the North Fork.

Today, threatened by deer, it is on the verge of local extinction.

(photo: Tom Rawinski)

# Financial Impact on Agriculture\*

**Thomas Wickham,** owner of Wickham's Fruit Farm and former Southold Town Councilman and Supervisor.

For farmers on the North Fork, deer damage isn't just a nuisance, it's a blow to their livelihoods, with crop damage resulting from a combination of browsing, plant destruction, and contamination. Farmers operating unfenced fields estimate average crop losses of 10% due to browsing. Additional damage comes from bucks breaking off young trees or branches while rubbing the "velvet" from their antlers. To make matters worse, farmers must now contend with a third source of deer damage: contamination from animal waste. The new Federal Food Safety Modernization Act will require all but the smallest fruit and vegetable producers to take steps to prevent this. While farmers have responded with fencing and by taking out some of the herd on their lands, neither method has significantly slowed the continued growth of the deer population. Meanwhile, fencing not only concentrates more deer on everyone else's property but also alters the traditional North Fork aesthetic of open farmland.

# What Can I Do to Help?

Email northforkdeer@gmail.com to find a hunter for your property. Note that our archers use only bows and arrows and cannot hunt within 150 feet of an occupied dwelling or farm building without the property owner's approval.

\*These sections have been summarized in part from guest editorials originally published in The Suffolk Times between Nov. 2014 and April 2015 and contain additional material provided by the NFDA.