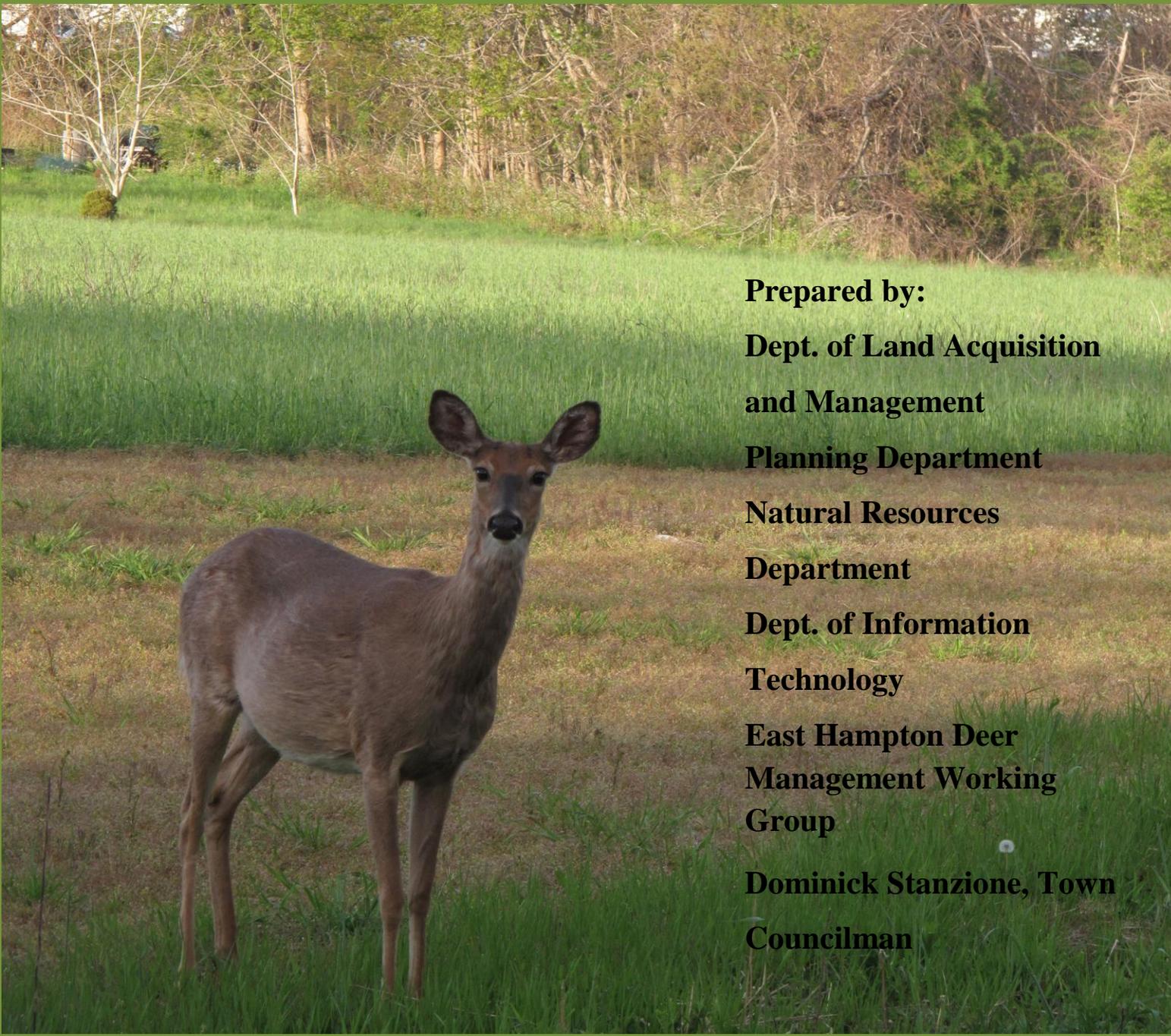


Management of the White-tailed Deer Population in East Hampton Town



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Adopted: June 20, 2013





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Introduction

Populations of white-tailed deer (*Odocoileus virginianus*) have recently increased in many areas of the eastern United States to the point of causing damage to ecosystems, people, rare plants, other wildlife & the deer themselves.

In East Hampton, the uncontrolled explosion in the deer population has reached an emergency level according to the Deer Management Working Group (DMWG). The DMWG proposes to address this emergency with a management plan that is comprehensive in its scope of solutions considered, effective in both short term results and long term sustainability and compassionate to all species, including people. The goal of this management plan is to restore balance and sustainability to the town's natural environment.

Overview: An Emerging Emergency

We have too many deer. In technical terms, the white-tailed deer population exceeds the community's cultural carrying capacity or is extremely near exceeding the human populations ability to absorb without meaningful threats to public safety, public health, personal property and the environment. The biological carrying capacity, the number of animals that the land can support, may also be at tipping point.

While scientific methods have yet to confirm these observations, it is the consensus of most people living in East Hampton. As stated, the factors determining "too many" are both cultural and biological.

There are several bases for the emerging public health crisis. Tick borne illnesses such as Lyme disease, Babesiosis and Ehrlichiosis have also increased. A report from a local doctor said the number of Lyme disease cases among his patients more than doubled from 60 in 2010 to 125 in 2011. The incidence of reported deer/vehicle collisions in East Hampton has increased from 25 in 2000 to 108 in 2011, an increase of over 400%. Property damage complaints are greater than ever and now originate from even the town's most urbanized areas. High fences (so-called Deer Fences), installed to prevent deer damage to landscaping, gardens and farm crops, have proliferated and are making an unmistakable negative impact on the character of our community. The Town's Architectural Review Board has issued 40 permits for installation of deer fence since January 2010, up from just a few permits in the prior two-years. A significant number of residents have installed deer fences without obtaining a permit. One resident said, it is was her "only protection against a deer invasion."

Cumulative negative economic impacts to town residents, businesses and tourism have *not* been formally assessed. However, common sense and anecdotal evidence strongly suggests economic and cultural damage far exceeds potential budgetary cost (which we have not fully identified, see

page 14) of implementing a meaningful deer management plan. Many residents have the unacceptable experience of having lost healthy access to their own back yards. This indicates that there are also substantial cultural and environmental negative impacts.

By way of illustration, police reports indicate deer collisions are increasing, despite caution of the driving public. Thankfully, no fatalities have been reported to date. The cumulated estimated costs of police action for deer collisions is not exactly known, as of this report, but it's likely to be meaningful. If costs of emergency transport of injured parties, treatment of actual injuries, auto damage repair and animal removal are included, any cost estimate would increase. It is the view of the DMWG that it is just a fraction of the untallied costs of not having an effective deer management plan.

There are important environmental costs to deer overpopulation. East Hampton has a significant amount of undeveloped (~43% preserved) land. Land preservation policy has created a diverse combination of large-tract land ownership Town, Village, County State, Nonprofit Organizations, Private. The DMWG identified the absence of any coordination across land management constituencies as contributing to the uncontrolled and damaging growth in the deer population. Any plan must address this issue. Deer recognize no governmental boundary.

Local preserved and native ecosystems have incurred significant environmental damage. Observations by town environmental staff and naturalists report that increased browsing on deer-preferred plants are changing species composition, as well as, the fundamental structure of these ecosystems. Many rare wildflowers are no longer seen. Common native herbaceous plants have declined noticeably. Forested lands show a clear browse line (the so-called Hampton Haircut), with many sections lacking nearly all of native herbaceous plants and having no saplings growing to replace canopy trees as they age and decay. Intense browsing of native species has led to an increase in unpalatable invasive plant species, such as garlic mustard (*Alliaria petiolata*).

The drastic negative environmental impacts to the forest understory and the ecology of non-forest habitats also damage populations of other wildlife. For example, native birds depending on herbaceous forest groundcover or nest low in trees or shrubs no longer have undamaged habitat available in large sections of our forest. These long-term changes adversely impact the integrity of East Hampton's native and preserved ecosystems.

Solutions

Communities from the Carolinas to Maine are presently addressing deer overpopulation. While some states have adopted deer management plans, municipal implementation, participation and effectiveness has been thwarted by government fragmentation, fiscal concerns, legal boundaries

created by private and public land ownership and the absence of a local public consensus on an effective response.

It is the consensus of the DMWG that the Town of East Hampton adopt this comprehensive plan that includes innovative and effective deer population management techniques. A clear deer-management policy --- to reduce the population to sustainable levels at soon as practically possible – is required. This policy directly addresses the emerging public health and safety emergency and provides for diverse options, including lethal and non-lethal methods, for long-term deer population sustainability.

Given the significant amount of preserved lands, parks, nature preserves, open-space owned by a combination of federal, state, county and local governments, tax-exempt organizations, land trusts, and private parties, coordinated deer-management practices must find methods to cross all types of ownership. Voluntary efforts at coordination among land managers, should be given an opportunity to develop before other options are considered.

The major factors affecting deer population, in the absence of large natural predators, are hunting, the automobile, disease, the food supply and availability of suitable vegetative cover. As East Hampton’s human population has grown, the deer population has grown to a level that is unhealthy and uncompassionate for the ecosystem in general, the deer and ourselves.

While the deer population has expanded, land clearing/home and road building increased the amount of “edge habitat” that deer prefer, simultaneously reducing the nearby acreage available for hunting. Suprisingly, the overall number of permitted hunters has decreased. Predation by automobile has increased. This kind of “management” technique is clearly undesirable and ineffective. If we continue, starvation or disease may eventually begin to deplete the deer population. This too is undesirable and uncompassionate. In the meantime, automobile accidents, environmental and economic damage and human disease will increase.

Finally, deer recognize no governmental boundary. The five towns making up the east end have had few coordinated efforts at comprehensive deer management. This should be explored.

Overview of Recent Efforts in East Hampton

Following an initial “Deer Summit” in February of 2010 called by Supervisor Bill Wilkinson, a consensus emerged that East Hampton needed a “a plan” that returns the number of deer to a level that allows our natural vegetation to grow, reduces the number of deer/human conflicts and enables the consideration of both lethal and nonlethal management techniques.

In January of 2011, the Town Board tasked its Nature Preserve Committee, a unit that has land management responsibilities for designated parcels within the town, to prepare a preliminary review (see Addendum). It made the following recommendations for nature preserve properties:

- encourage and facilitate hunting on private land
- encourage the grouping of smaller properties for hunting
- encourage nuisance permits
- maintain a list of hunters that landowners can contact
- provide information regarding how property owners can donate deer meat to local food pantries
- obtain more accurate estimates of the current deer population and the size of a sustainable herd.

These brief recommendations were welcome. To further acknowledge and to comprehensively address the emerging emergency, the DMWG was formed under the direction of Councilman Dominick Stanzione to develop a deer management plan.

The DMWG brought together, for the first time decision makers across governmental boundaries and land ownership for an ongoing policy forum about the deer emergency and potential solutions. Discussions were held on many aspects of emergency and sustainable deer management.

Group members (see Addendum) included representatives from all area governments, non-governmental entities and regulatory agencies that have direct land management responsibilities affecting the deer population.

The DMWG includes: the United States Department of Agriculture, Suffolk County Parks Department, New York State Parks, Village of East Hampton; Village Preservation Society of East Hampton; Suffolk County Parks; NY State Parks; New York State Department of Environmental Conservation (NYSDEC); The Peconic Land Trust; The Nature Conservancy; The East Hampton Sportsmen's Alliance; The Group for Wildlife; The Group for the East End; East Hampton Dept of Natural Resources, East Hampton Department of Land Acquisition & Management; East Hampton Planning Department; East Hampton Town Nature Preserve Committee; East Hampton Town Police; Southampton Town, New York State Senator Ken LaValle, New York State Assemblyman Fred Thiele; Suffolk County Legislator Jay Schneiderman.

Michelle Gibbons and Chip Hamilton of the NYSDEC made significant contributions. The NYSDEC controls all methods of wildlife population management regulation including permits for hunting and emergency action, "take" numbers, hunting areas, nonlethal population control methods and must approve all local plans, including this one.

New York State Senator LaValle and Assemblyman Thiele provided critical and accessible legislative context and leadership to the effort. County Legislator Jay Schniederman provided important local and county perspective. Larry Cantwell, East Hampton Village Administrator offered valuable and experienced Village perspective to the DMWG.

As part of Councilman Stanzione’s outreach, the East Hampton Group for Wildlife was invited to participate and called for any plan to include support for development of options for effective, nonlethal techniques. Consideration of emerging nonlethal technologies are included as part of the draft plan.

The East Hampton Sportsman’s Alliance offered keen “hunters’ insight” into practical aspects of hunting as a component of any plan.

The DMWG also sought participation of Lee Humberg, of the United States Department of Agriculture Wildlife Service (USDA). Mr. Humberg provided valuable information and offered assistance, including emergency services, that the agency provides to municipalities across the nation.

Mr. Humberg explained that the USDA is available to develop and implement an action plan for aggressive deer population management. He presented important information regarding the department’s *Emergency Culling Program* and explained how this element can be included in a comprehensive deer management plan. The services provided by USDA complement the regulatory authority of the NYSDEC.

State Law Provides a Path for an Integrated Plan

The New York State Environmental Quality Review Act (SEQRA) regulations provided a process for formal municipal adoption of a Comprehensive Deer Management Plan.

The adoption of any Comprehensive Deer Management Plan is an “action,” as defined by 6NYCRR Part 617 (SEQRA). The Town Board directed the Planning Department to prepare an Environmental Assessment Form (EAF) Part I, declared lead agency status and held a public hearing. Following comments received at the public hearing, the EAF Part II was drafted by the Planning Department. The Town Board then discussed the public hearing comments and made a Negative Declaration pursuant to SEQRA. Once adopted, the final Deer Management Plan can be considered for inclusion as an element of the Town’s Comprehensive Plan.

Outline of the Deer Management Plan

The DMWG recommends adoption of a five year deer management plan, consistent with the NYSDEC Management Plan. Having acknowledged the deer emergency, at least as it concerns the public interest, the DMWG suggests the first step is to adopt a five-year comprehensive deer management policy and commit to implement it quickly.

The DMWG recognizes that people of East Hampton are an important part of the “environment” and have unavoidable responsibility to protect its habitat. DWMG also recognizes that awareness and consideration of animal life and biological diversity is also a important element of human responsibility. All agree, with regard to deer in East Hampton, what government has done in the past has failed.

The draft deer management plan includes the following recommendations:

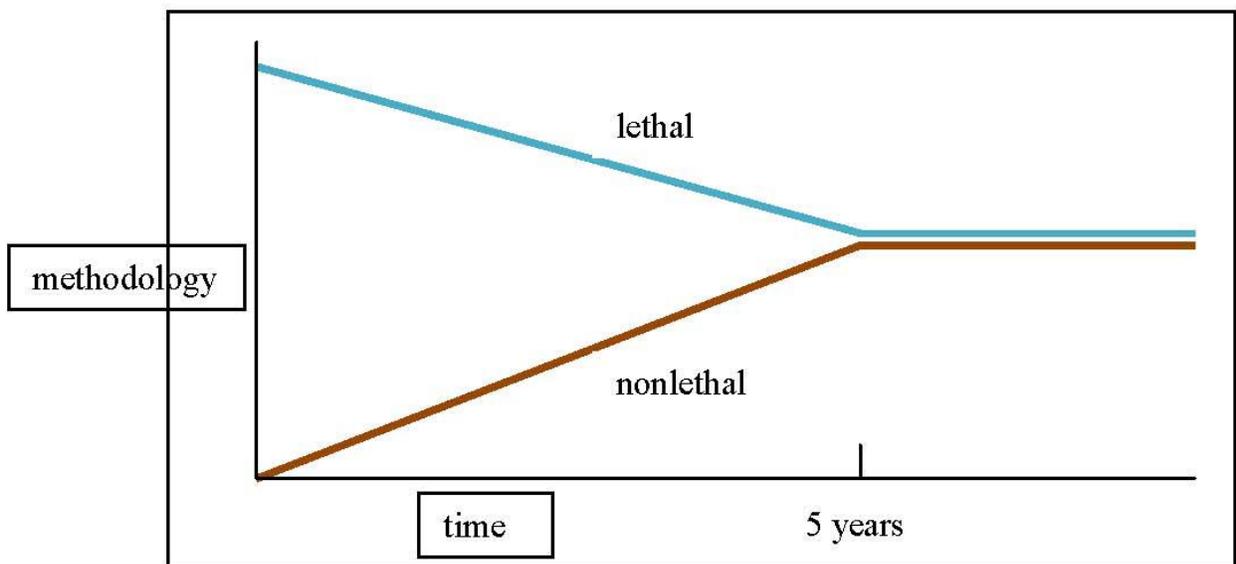
- obtain the most reliable baseline survey of the current deer herd
- increase hunting across a broader range of public and private land
- formally establish a Deer Management Advisory Committee
- coordination of local actions that effectively cross all government and quasi-government and private land management within the Town
- establish reliable metrics to track program effectiveness
- possible need for use of coordinated emergency deer culling
- establish a program for increased communication and coordination among town and village residents, government agencies and all members of the DMWG
- develop support for of nonlethal deer management methodologies once the deer population has been stabilized
- Establish a “Deer Management” line item in the annual budget that crosses departmental lines and includes small grants in support of nonlethal research.
- Increased efforts for funding support through grants, fence fees and cost sharing
- consideration of more coordinated “Multi-Town” Deer Management plan.
- coordination with the NYSDEC Deer Management Plan, 2011.
- Establish and fund a deer management coordinator

- Require an annual report to the Town by the deer management coordinator

In broad terms, this draft plan instructs municipal officers to incorporate best management practices over a five-year period, coinciding with the NYS Deer Management Plan, that effectively and compassionately reduces the deer herd to an ecologically and culturally sustainable level. The reduction to sustainable deer population levels is important because it enables development and utilization of nonlethal methodologies an opportunity to participate in overall sustainable deer management, as they become both cost-efficient and effective.

2011 Town Board Actions to Facilitate Hunting

In accordance with preliminary recommendations from the DMWG, the Town Board passed a resolution authorizing the Town Clerk to distribute “bonus” tags and information from the DEC to hunters. The Board also waived the dumping fee for deer carcasses at the town recycling center. These actions enable local hunters to harvest additional deer without first traveling to Stony Brook for bonus tags and allow nuisance hunters to use the recycling facility without paying commercial hauler charges.



The schematic above represents a rough outline of the deer management concept

Specific Recommendations

The DMWG recommends inclusion of each of the following elements into a more detailed comprehensive, long-term deer management plan that recognizes the interrelationship of each part, resulting in a plan that is comprehensive, effective and compassionate.

The DMWG recommends that Village, Town, County laws be more fully coordinated with State wildlife laws, as administrated by the DEC, to take maximum advantage of all the management options contained in the State's 2011 Deer Management Plan. The Town should join the DEC in its efforts to change state law as recommended.

Actions the Town Board Considered

Each of the actions listed below are described in detail in the narrative following this outline.

1. Assess Deer Numbers

- a. Aerial Survey
- b. Distance Sampling
- c. No Formal Assessment

2. Actions to Reduce the Deer Population

- a. Explore Opening Additional Co-owned (Town/County/State) Land to Bowhunting During the 2012 Deer Season
- b. Open the January Firearms Season to Non-residents
- c. Facilitate NYSDEC Aggregate Nuisance Permits for Residential/Private Property Owners
- d. Apply to the NYSDEC for Nuisance Permits for Town-owned Lands
- e. Expand the Actual Area Under Deer Management
- f. Facilitate the Donation of Venison to Local Food Pantries
- g. Contract with a Professional Deer Removal Organization (e.g. USDA, Wildlife Services) to Cull the Deer Population

3. Deer Monitoring and Community Communications

- a. Use the Town, Town Trustees, East Hampton Village and Sag Harbor Village Websites and GIS Mapping Capabilities for Management, Communications and Coordination
- b. Create a Nuisance Deer Hotline
- c. Establish Deer Management Programming on LTV
- d. Provide Residents and Tourists with Information on Living with Deer
- e. Evaluate the Roadside Reflectors.
- f. Inventory and Monitor the Impact of the Deer Population on Native Vegetation

4. Adjustments to State and Local Laws

- a. Lobby for State Actions
- b. Revise Local Deer Fence Law
- c. Explore codifying elements of deer management

5. Long Term Sustainable Deer Management

- a. Support Non-lethal Methods of Sustainable Deer Population Control
- b. Make the DMWG a Permanent Advisory Committee
- c. Ensure Adequate Staffing for Deer Management
- d. Provide Annual Budget for Deer Management

Actions for Town Board Consideration (Narrative)

1. Assess Deer Numbers

a. Aerial Survey

The Village of North Haven conducted an infrared aerial flyover to count and especially locate deer herds before beginning their very successful project in 1996. Their cost for the flyover was about \$5,000.

According to Brookhaven National Laboratory and the USDA, the aerial survey method is the most valuable initial activity for an effective and comprehensive deer management plan because it provides the most accurate (85-95%) estimate of the extant deer population as well as location information. It also offers a firm basis for any metric of effectiveness. A similar survey of East Hampton's 47,740 acres cost \$13,174.50.

b. Distance Sampling

An estimate of East Hampton's deer population was completed in 2006 by Frank Verret of Wildlife Biometrics for the East Hampton Group for Wildlife using a distance sampling method (see Addendum). Mr. Verret estimated that the town as a whole was supporting an average deer density of 51.02 deer/mi² deer with a range of 10-85 deer/mi² where 20-40 deer/mi² was recommended. It is possible to repeat this study to obtain a more up-to-date estimate. The cost of the initial survey was \$14,000.

c. No Formal Assessment

It is also possible to begin a herd reduction strategy based only on the need demonstrated by the 2006 estimate and the current anecdotal environmental and cultural conditions, which indicate a material increase in population since 2006 and a serious and unsustainable environmental, economic and cultural condition. To some in the DMWG, the need to scientifically verify the number of deer is unnecessary. The emergency is already obvious.

However, one benefit of a new and accurate current estimate is that it would serve as a measure of the program's effectiveness. It would provide a baseline. The initial count methodology could be repeated after a time; or the Plan could follow North Haven's example and use deer-take data and "counts" from a more formalized voluntary counting effort of hunters, trail users and other environmental agencies. Of course, use of other metrics to broadly measure effectiveness could be made, ie. the obvious cultural indicators—including demand for legal and illegal deer fence, victims of disease, auto accidents, and economic loss. The NYSDEC is available to advise us, and is the only state agency responsible for managing deer populations.

2. Actions to Reduce the Deer Population

a. Open Additional Co-owned (Town/County/State) Land to Bowhunting during the 2012 Season

DWMG recommended opening more land for bowhunting opportunities. Opening "Amsterdam Beach" (SCTM# 300-21-2-24.017, 300-32-6-1.002), for example, to deer hunting added nearly 200 acres of hunted land to the town. It is a small addition, but the cooperative management agreement among New York State, Suffolk County, and the Town of East Hampton, as co-

landowners provided more opportunity for hunters to reduce the deer population during regular hunting seasons. The Town's Land Acquisition & Management Department coordinated with State and County representatives to facilitate a management plan specific to this site. The NYSDEC has expressed a willingness to manage Amsterdam Beach as a cooperative hunting area similar to Hither Woods. The Town Board modified Chapter 91 of the Town Code to allow hunting on this property. Other smaller properties should be considered for deer hunting as well.

b. Open the January Firearms Season to Non-residents

The NYSDEC has noted a nearly 40% decline in deer hunting participation in New York since the mid-1980's. Even with this decrease in the number of people hunting, the number of deer harvested per square mile in East Hampton has risen from 1.00 in 1990 to 6.81 in 2009 (see Addendum).

According to the NYSDEC hunting is the most cost-effective management tool used by all state wildlife agencies to manage deer populations in emergency situations.

Currently, only East Hampton Town residents or taxpayers can hunt on East Hampton Town lands, with the exception of bowhunting, where a resident or taxpayer may take a guest if the guest is registered with the Town Clerk. Opening the January firearms season to registered guests of residents would increase the number of hunters, as we expand the amount of acreage open to hunting in the Town. Non-residents could be permitted by guest license or included in the current lottery system. In the latter case, the DMWG would like to see East Hampton Town residents given preference. These options require a change to Chapter 91 of the Town Code.

c. Facilitate NYSDEC Aggregate Nuisance Permits for Residential/Private Property Owners

Additional land can be opened to deer hunting if the owners of smaller adjoining properties gave permission to hunt. The attached maps illustrate the potential for the combination of land.

Analysis of the impact of deer reduction on any combination of parcels is advisable before deer hunting is permitted on new properties. Aggregation could include written permission from landowners to waive the 500' discharge setback, allowing for even larger hunting areas.

A regular method of combined coordination and communication should be established among Town staff, the NYSDEC, Suffolk County and Village staff (when applicable). Deer Management Coordination Staff could facilitate the NYSDEC nuisance permit application process for private property owners and communicate NYSDEC rules and regulations to property owners who want to participate in deer management and allow hunting on their property during the regular hunting season. The DMWG strongly suggested that quick access to information, maps and the availability of assistance be made available on the Town's website. These efforts are seen as essential to facilitate and promote public understanding of this part of the deer management process.

d. Apply to the NYSDEC for Nuisance Permits for Town-owned Lands

The Town, working with the DMWG, the Nature Preserve Committee and Town staff should approve temporary or permanent additional Town properties, needed for achieving the goals of a Comprehensive Deer Management Plan, for hunting under specific nuisance permits if issued by the NYSDEC. NYSDEC nuisance permits may also provide for selective baiting.

e. Expand the Actual Area Under Deer Management

The DMWG engaged the services of East Hampton Town's GIS Mapping service to gain an understanding of the current amount of land currently under any Deer Management. Initial GIS mapping of all hunted lands in East Hampton show that deer hunting occurs on only about 22% (9,441 acres) of land within the Town (see attached maps). This small amount of land under "deer management" provides an indication of how the deer emergency developed. More importantly, it clearly indicates the need for this draft plan to deal squarely with highly fragmented land ownership. Dealing effectively with this fragmentation requires voluntary action by private landowners. The DMWG suggests efforts be made to formalize such voluntary action, before changes to law, mandating such coordination, are considered.

The GIS initiative further revealed a significant portion of residential areas located relatively close to woods and preserved land, providing deer with a convenient alternative habitat to forest life. The obvious impacts of this development on taxpaying residents now exceed any reasonable level of accommodation. These "neighborhood deer havens" make important claims on any deer management initiative.

f. Facilitate the Donation of Venison to Local Food Pantries

East Hampton's food pantries already provide an important outlet for the distribution of processed deer meat, along with their other food items. Expanding the access of harvested deer through food pantries would be an important residual benefit of this draft deer management plan. The DMWG recognizes the importance and efforts of our local food pantries and strongly suggests a final plan include a system for expanded deer meat distribution, and specifically locating and organizing people to butcher and store the meat. This should be implemented.

g. Contract with a Professional Deer Culling Organization (e.g. USDA, Wildlife Services) to Cull the Deer Population

The United States Department of Agriculture, Wildlife Services program provides a full culling service for the Town's deer population. The USDA process for formulating an emergency culling plan includes thorough preliminary population analysis and survey work (FLIR), herd location analysis, property management authorizations and up to a three year period of periodic culling.

Any culling program must be developed in cooperation with and supervision by the NYSDEC and importantly local hunters i.e. East Hampton Sportsman's Alliance and the Town's Deer Management Advisory Committee. A Request for Proposal to examine the cost of this option could be issued by the Town Board or additional professional deer removal services may be explored. The earliest any such effort could be implemented would be FY 2014, however inter-governmental planning would begin in FY 2013. Total costs for a full three-year implementation program could approach \$90,000.

This option is the most aggressive of all recommendations of the DMWG. Hunters and humanitarians recognize this, but many others consider it to be overdue. It is understood only communities with severe environmental, health and safety, cultural and economic distress would consider such a powerful option. The effectiveness of such an option is clear. The cost is noteworthy. It is included in the Plan, but requires a separate SEQRA review.

3. Deer Monitoring and Community Communications

a. Use the Town, Town Trustees, East Hampton Village and Sag Harbor Village Websites and GIS Mapping Capabilities for Management, Communications and Coordination

In order to address the problems created by fractional property ownership, the Town website and GIS program will be used to actively and interactively monitor, communicate and coordinate with land owners/managers and the community. This GIS program will be used to gauge program effectiveness by, for example, tracking harvest data, mapping complaints from a "nuisance deer hotline" (see below) and coordinating hunters with both residential home owners and the larger landowners/managers.

The Town's deer management webpage will be used by landowners, hunters and the Town Clerk to expedite nuisance or hunting permit processes. A deer management web application ("a deer app") could provide for more energetic and informative communication between landowners, hunters and residents. Available information could include landowner reports, meeting schedules and links to NYSDEC and other landowners' websites. The Peconic Land Trust has expressed an interest in placing its hunting information on the Town website.

b. Create a Nuisance Deer "Hotline"

A nuisance deer hotline will provide a place for residents to report deer problems, whether on private or public land. This information can be integrated with the GIS mapping program to coordinate hunters and/or nuisance permit applicants.

c. Establish Deer Management Programming on LTV

A television series could be used to inform people about the deer emergency, explain the dynamics of deer population biology and the need for active deer management.

d. Provide Residents and Tourists with Information on Living with Deer

Deer are vital part of East Hampton's environment and contribute to the character of our community. Various forms of communication should be used to provide people with information on how to avoid conflicts with deer and other wildlife. This should include a slow-driving campaign, information on deer resistant planting and tick-borne disease prevention.

e. Evaluate the Roadside Reflectors.

In January, 2008 and 2011 the East Hampton Group for Wildlife reported installing reflectors on a segment of Stephen Hands Path in an effort to reduce deer/vehicle collisions. The project should be reviewed for possible to other areas that are prone to such collisions.

f. Inventory and Monitor the Impact of the Deer Population on Native Vegetation

Observations by town staff indicate that local preserved and native ecosystems have incurred significant environmental damage from overbrowsing by deer. A scientific inventory and analysis of existing conditions could be conducted and a plan for continuous monitoring could be developed.

4. Adjustments to State and Local Laws

a. Lobby for State Actions

Appendix 5 of the NYSDEC's *Management Plan for White-tailed Deer in New York State 2011-2015* discusses a number of proposed changes to the Environmental Conservation Law that could help the Town of East Hampton in its efforts to reduce the deer population to a healthy level. Included in the recommended changes is a reduction in the setback distance for the discharge of vertical bows and crossbows from at least 500' to at least 150' from a structure. The 500' setback would still remain for firearms. A circle with a 500' radius contains approximately 18 acres. A circle with a 150' radius contains approximately 1.6 acres. This proposed change recognizes the much shorter range of arrows, typically 25 yards or less. This law change could be lobbied for by the Town.

The NYSDEC Plan also recommends expansion of the "open area" for the firearms season and increasing the number of days of the season. These actions both could provide more opportunity for deer hunting and could be lobbied for by the Town.

b. Revise Local Deer Fence Law

The Town may consider revising the existing deer fence regulations. Consultation with the Village should also be sought on deer fencing. The proliferation of permitted and illegal deer fencing provides residents with the only meaningful protection against damage by deer.

A decade of costly environmental inaction and seeming unawareness of a burgeoning deer emergency has left East Hampton homeowners, businesses, farmers and tourists with only one non-lethal defense. Fences push the deer emergency out to other residents and they alter the character of a community. Yet, without fences, there would be no protection *at all* against the damage to property. Taxpayers have come to the paradoxical place, where they enclose property in wire and call it freedom. Proliferation of deer fences are no substitute for a deer management plan.

It may seem hard hearted to recommend significant limits on deer fencing. However, as long as deer fences proliferate, a deer management plan may not have the necessary support for success. The DMWG recommended collection and analysis of deer fence metrics as one element in measuring the effectiveness of this deer management plan. Deer fences are a clear signal of a failed deer management policy.

c. Explore Codifying Elements of Deer Management

The East Hampton Town Code currently contains deer related code provisions, primarily directed at hunting regulations. The New York State Deer Management Plan suggests several local government codification options, including residential nuisance permitting and reductions in setbacks. Exploration of meaningful code amendments that encourage participation with this management policy should be pursued.

One suggestion was a fee/fine/tax for large tract private nonprofit property owners' for properties over a certain size that don't participate in deer management by allowing reasonable control measures to be permitted on site. This would seek to address the potential management gap for nonprofit organizations that have accepted land with covenants prohibiting specific wildlife management techniques.

5. Long Term Sustainable Deer Management

a. Support Non-lethal Methods of Sustainable Deer Population Control

Fertility control has been suggested a number of times by the East Hampton Group for Wildlife as a complete alternative to all lethal methods of deer population control. Fertility control of free-ranging deer in New York State is only permitted pursuant to NYSDEC license for scientific purposes and must be for legitimate scientific research. At this time, the NYSDEC does not

consider fertility control to be a viable, stand-alone option for managing deer populations in New York.

Nevertheless, the plan recognizes a place for non-lethal management options to help sustain healthy deer populations in East Hampton Town. Firearm discharge prohibitions in the Village may make sterilization a more acceptable tool in the Village. A collaborative effort between the Town & Village to support research for a cost effective a sterilization program could prove useful as part of an integrated comprehensive deer population management strategy that includes effective lethal removal of deer in conjunction with a proposal for permitted scientific research. A well-established wildlife management group can be contracted to coordinate a sterilization program.

. The Town Board could consider proposals for legitimate permitted scientific research that may be conducted in limited areas *after* the number of deer has been reduced to a healthy level. A comprehensive deer management plan includes both lethal and non-lethal methodologies.

b. Make the DMWG a Permanent Advisory Committee

Since deer management will be an ongoing process, the diverse expertise of the Deer Management Working Group could be useful long term. The Town Board should consider make the DMWG a permanent advisory committee, calling it the Deer Management Advisory Committee.

c. Ensure Adequate Staffing for Deer Management

Coordination of both public and private land managers is a critical element of effective deer management. This includes coordination with Village of East Hampton, Southampton Town, Suffolk County, State of New York, non-governmental organizations, private property owners and the public. In order to implement an effective deer management program, it is essential to designate current staff members or hire new staff members to perform these duties as well as to coordinate all matters relating to the plan. Staff may also be required for website maintenance, GIS mapping, grant coordination and coordination of non-lethal methodology research and implementation. Staff will also be necessary to educate and communicate with the public about the Town's deer management efforts.

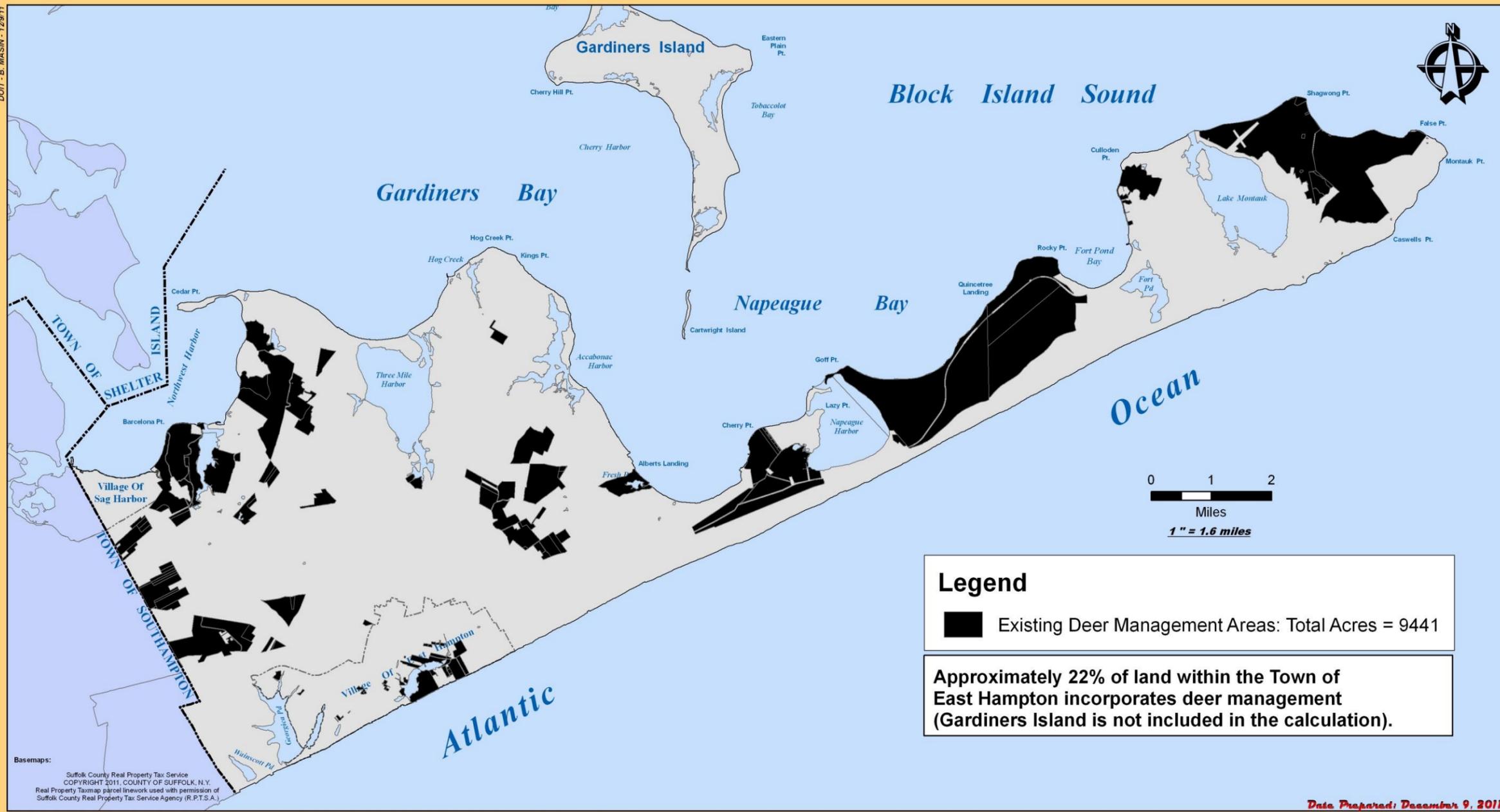
d. Provide Annual Budget for Deer Management

Given the multiyear commitment required to address the deer emergency, this plan recommends annual budgetary support for the duration of the plan.

While the DMWG offers three options for deer population estimates, consultation with USDA and Brookhaven National Laboratory suggest that the best first step to a solution is to have a

scientifically reliable estimate of the current deer population. Other costs include the implementation of an emergency culling program using the USDA or other professional wildlife removal service, which could cost approximately \$90,000 over a three year period. Still other cost considerations include hiring a part-time employee as a Deer Management Coordinator (~\$30,000) and necessary supplies (~\$5,000). A fund for non-lethal methodology research should be considered (~\$10,000) as well as web design (\$10,000).

Funding sources for financing the preliminary estimate of the draft deer management plan should include grants, CPF management and stewardship allowances, fees for hunting permits and deer fences and lastly, direct appropriation.



Legend

■ Existing Deer Management Areas: Total Acres = 9441

Approximately 22% of land within the Town of East Hampton incorporates deer management (Gardiners Island is not included in the calculation).

Basemaps:
Suffolk County Real Property Tax Service
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Suffolk County Real Property Tax Service Agency (R.P.T.S.A.)

Date Prepared: December 9, 2011



Prepared By
THE TOWN OF EAST HAMPTON
Suffolk County, New York
Dept. of Information Technology

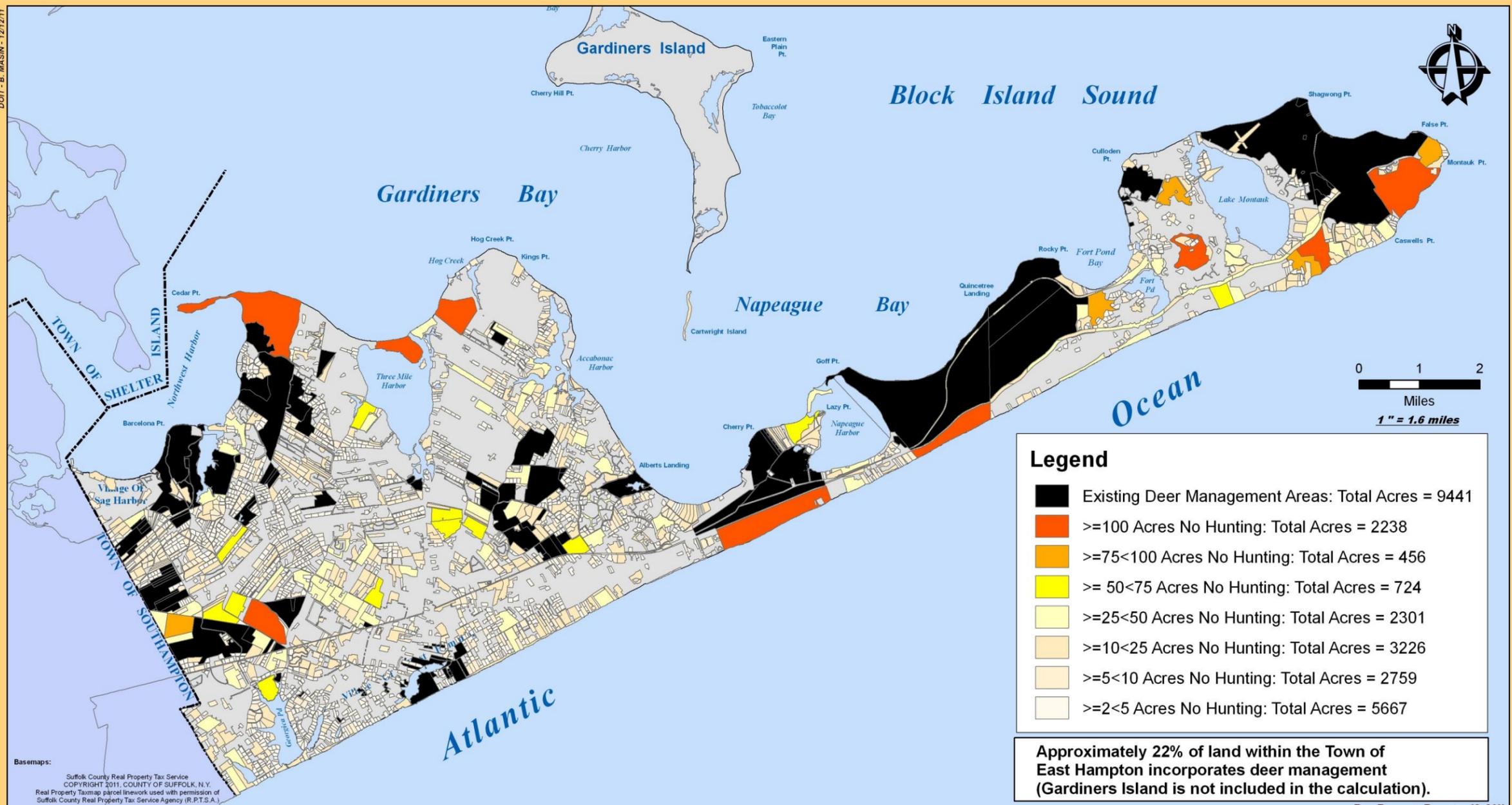
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TOWN OF EAST HAMPTON

Existing Deer Management Areas in The Town of East Hampton

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Legend

Black	Existing Deer Management Areas: Total Acres = 9441
Dark Orange	>=100 Acres No Hunting: Total Acres = 2238
Medium Orange	>=75<100 Acres No Hunting: Total Acres = 456
Light Orange	>= 50<75 Acres No Hunting: Total Acres = 724
Yellow	>=25<50 Acres No Hunting: Total Acres = 2301
Light Yellow	>=10<25 Acres No Hunting: Total Acres = 3226
Very Light Yellow	>=5<10 Acres No Hunting: Total Acres = 2759
White	>=2<5 Acres No Hunting: Total Acres = 5667

Approximately 22% of land within the Town of East Hampton incorporates deer management (Gardiners Island is not included in the calculation).

Date Prepared: December 12, 2011



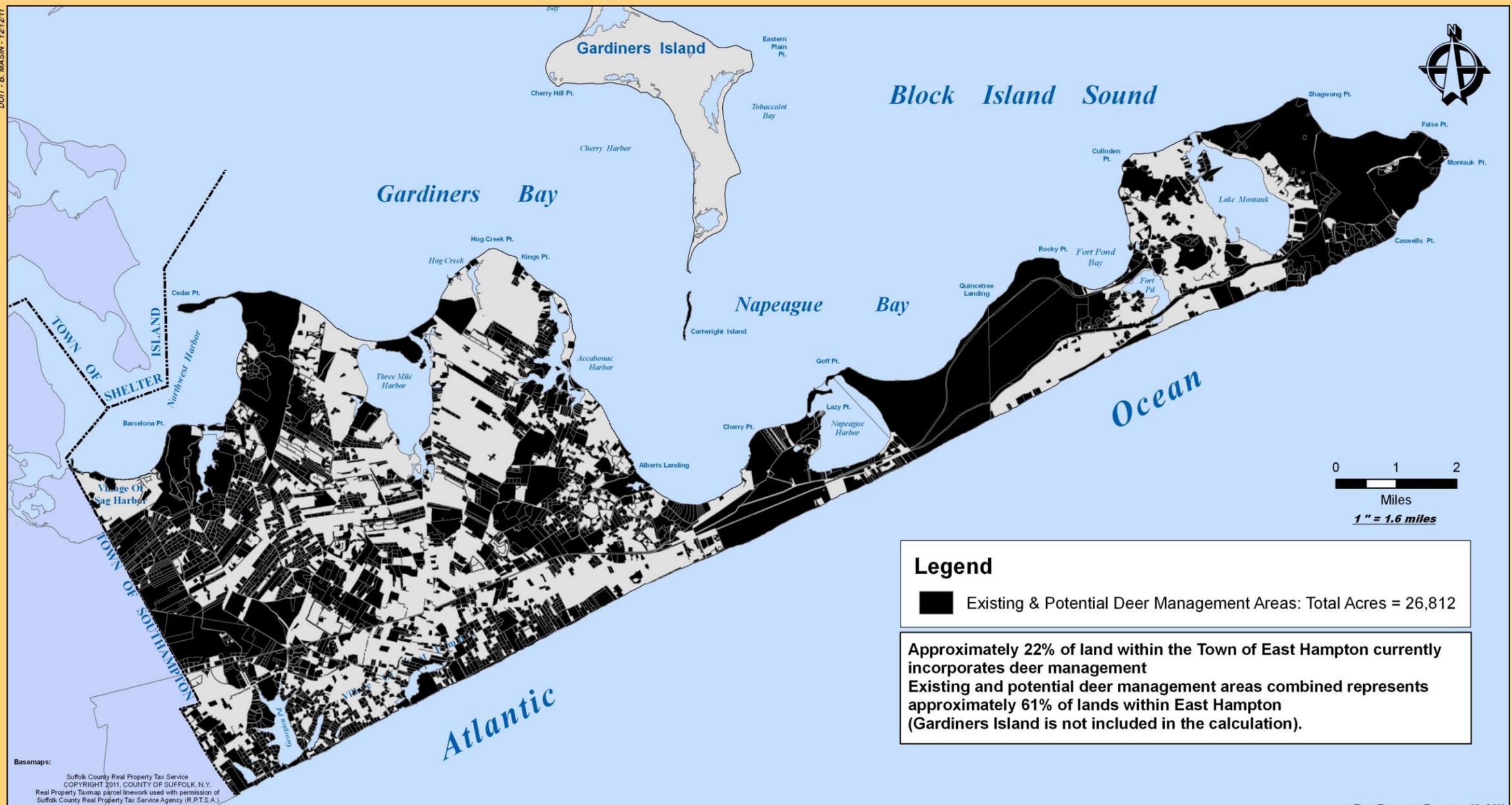
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TOWN OF EAST HAMPTON Potential Deer Management Areas in The Town of East Hampton

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DOT - B. MASIN - 12/12/11



Legend

■ Existing & Potential Deer Management Areas: Total Acres = 26,812

Approximately 22% of land within the Town of East Hampton currently incorporates deer management
 Existing and potential deer management areas combined represents approximately 61% of lands within East Hampton
 (Gardiners Island is not included in the calculation).

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Date Prepared: December 12, 2011



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TOWN OF EAST HAMPTON Combined Existing & Potential Deer Management Areas in The Town of East Hampton

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Deer Management Working Group Members

Andrew Gaites, East Hampton Town Land Acquisition and Management Department

Bill Crain, East Hampton Group for Wildlife

Dan Heston, The Peconic Land Trust/North Fork Stewardship Manager

Dr. Ellen Crain, East Hampton Group for Wildlife

East Hampton Town Councilman Dominic Stanzione

Ed Ecker, East Hampton Town Police Chief

Frederick Hamilton, New York State Department of Environmental Conservation/Division of Fish, Wildlife & Marine Resources

Jeremy Samuelson, The Group for the East End

Jim Brundige, East Hampton Town Airport

Julie Zaykowski, Peconic Land Trust/Director of Administration

Kathy Cunningham, East Hampton Village Preservation Society

Kimberly Shaw, East Hampton Town Natural Resources Department

Liza J. Bobseine, New York State Department of Environmental Conservation/Environmental Conservation Officer

Larry Penny, East Hampton Town Natural Resources Department

Lee Humberg, United States Department of Agriculture Wildlife Service

Len Czajka, East Hampton Town Nature Preserve Committee, Deer Subcommittee Chair

Ltd. Chris Hatch, East Hampton Town Police

Marguerite Wolffsohn, East Hampton Town Planning Department

Matt Swain, The Peconic Land Trust/ South Fork Land Steward

Michelle Gibbons, New York State Department of Environmental Conservation/Regional Wildlife Manager

Mike Scheibel, The Nature Conservancy/ Mashomack Preserve Manager

Nick Gibbons, Suffolk County Parks/Principal Environmental Analyst

Pam Greene, Peconic Land Trust/VP of Stewardship

Ron Delsener, East Hampton Group for Wildlife

Russ Calemno, East Hampton Town Nature Preserve Committee/Food Pantry/Waterfowl Association

Terrence O’Riordan, The East Hampton Sportsmen’s Alliance

Thomas Miller, East Hampton Town Nature Preserve Committee/Local Hunter

Tom Dess, Supt. NY State Parks

William Wilkinson, East Hampton Town Supervisor

EX OFFICIO:

Anna Throne-Holst, Southampton Town Supervisor

Fred Overton, East Hampton Town Clerk

Fred Thiele, New York State Assemblyman

Jay Schneiderman, Suffolk County Legislator

Ken La Valle, NYS Senator

Larry Cantwell, Village of East Hampton Administrator

Michael Jeffrey Griffith, Attorney

Tracey Bellone Suffolk County Parks Deputy Commissioner



DEPARTMENT OF ENVIRONMENTAL CONSERVATION
20 - Year Town Total
 CALCULATED LEGAL DEER TAKE IN NEW YORK STATE



COUNTY	SUFFOLK	TOWN	EAST HAMPTON	AREA:	69.7 SQ MILES
5 YEAR AVE.	139 BUCKS	414 TOTAL DEER		HIGH BUCK TAKE	156 2006
10 YEAR AVE.	127 BUCKS	385 TOTAL DEER		HIGH TOTAL TAKE	475 2009

YEAR	.....MALES.....		.....FEMALES.....		TOTAL	HARVESTED DEER/SQUARE MILE			AD FE/ AD MA IN HARVEST	BUCKS 3 YR AVGS
	ADULTS	FAWNS	ADULTS	FAWNS		ADULT MALES	ADULT FEMALES	TOTAL DEER		
2009*	154	57	192	72	475	2.21	2.75	6.81	1.25	0
2008*	138	59	140	82	419	1.98	2.01	6.01	1.01	145
2007*	143	43	153	51	390	2.05	2.20	5.60	1.07	146
2006*	156	68	155	65	444	2.24	2.22	6.37	0.99	135
2005*	106	47	140	50	343	1.52	2.01	4.92	1.32	120
2004*	98	45	124	52	319	1.41	1.78	4.58	1.27	107
2003*	117	52	149	74	392	1.68	2.14	5.62	1.27	108
2002*	109	80	130	74	393	1.56	1.87	5.64	1.19	117
2001*	126	49	96	56	327	1.81	1.38	4.69	0.76	118
2000*	119	54	110	65	348	1.71	1.58	4.99	0.92	129
1999*	143	33	100	84	360	2.05	1.43	5.16	0.70	128
1998*	122	40	114	102	378	1.75	1.64	5.42	0.93	127
1997*	116	56	104	51	327	1.66	1.49	4.69	0.90	119
1996*	119	63	121	72	375	1.71	1.74	5.38	1.02	115
1995*	110	66	104	52	332	1.58	1.49	4.76	0.95	108
1994*	95	46	98	43	282	1.36	1.41	4.05	1.03	96
1993*	84	65	88	47	284	1.21	1.26	4.07	1.05	80
1992*	60	38	50	30	178	0.86	0.72	2.55	0.83	65
1991*	51	29	38	16	134	0.73	0.55	1.92	0.75	46
1990*	27	7	25	11	70	0.39	0.36	1.00	0.93	35

Wednesday, April 14, 2010



DEPARTMENT OF ENVIRONMENTAL CONSERVATION
20 - Year County Total
 CALCULATED LEGAL DEER TAKE IN NEW YORK STATE



COUNTY		SUFFOLK		AREA: 903.3 SQ MILES					
5 YEAR AVE	775 BUCKS	2379 TOTAL DEER		HIGH BUCK TAKE	850 2006				
10 YEAR AVE.	750 BUCKS	2284 TOTAL DEER		HIGH TOTAL TAKE	2777 2009				
YEAR	.....MALES.....		.....FEMALE S.....		TOTAL	HARVESTED DEER/SQUARE MILE			AD FE/ AD MA IN HARVEST
	ADULT	FAWNS	ADULT	FAWNS		ADULT MALES	ADULT FEMALES	TOTAL DEER	
2009	823	309	1253	392	2777	0.91	1.39	3.07	1.52
2008	805	308	1002	413	2528	0.89	1.11	2.80	1.24
2007	781	228	876	274	2159	0.86	0.97	2.39	1.12
2006	850	275	937	295	2357	0.94	1.04	2.61	1.10
2005	614	260	911	291	2076	0.68	1.01	2.30	1.48
2004	650	264	772	328	2014	0.72	0.85	2.23	1.19
2003	759	321	938	438	2456	0.84	1.04	2.72	1.24
2002	691	355	767	335	2148	0.76	0.85	2.38	1.11
2001	786	289	676	293	2044	0.87	0.75	2.26	0.86
2000	745	347	789	397	2278	0.82	0.87	2.52	1.06
1999	638	258	618	351	1865	0.71	0.68	2.06	0.97
1998	554	217	545	308	1624	0.61	0.60	1.80	0.98
1997	507	226	462	212	1407	0.56	0.51	1.56	0.91
1996	575	281	553	217	1626	0.64	0.61	1.80	0.96
1995	453	272	484	206	1415	0.50	0.54	1.57	1.07
1994	422	232	479	181	1314	0.47	0.53	1.45	1.14
1993	400	204	407	176	1187	0.44	0.45	1.31	1.02
1992	361	159	294	137	951	0.40	0.33	1.05	0.81
1991	275	114	231	75	695	0.30	0.26	0.77	0.84
1990	181	63	152	64	460	0.20	0.17	0.51	0.84

Thursday, April 15, 2010



TOWN OF EAST HAMPTON

159 Pantigo Road
East Hampton, New York 11937

Tel: (631) 324-3187
Fax: (631) 324-6280

Nature Preserve Committee

Zachary Cohen, Chair.

Rick Whalen, V-Chair.

Members:

Randy Bond, SC Parks

Russell J. Calemmo

Eileen Roaman-Catalano

Len Czajka

Jim Grimes

Joe Lombardi

Tom Miller

William Nicholas

Ex officio:

Dominick Stanzione, TB Liaison

Andrew Gaites, NP Envir. Tech.

Larry Penny

Barbara Clafin, Secretary

January 24, 2011

To: Supervisor Bill Wilkinson

Councilpersons Pete Hammerle, Julia Prince, Theresa Quigley and
Dominick Stanzione

Re: Deer Management Recommendation Report

Deer Management Report

(Deer Management Subcommittee, East Hampton Town Nature Preserve Committee)

January, 2011

Len Czajka – Subcommittee Chair, Russ Calemmo, Jim Grimes, Tom Miller and
Larry Penny, Natural Resources Director

Reasons for Deer Management

- * Reduce Deer Vehicle Collisions
- * Reduce Agricultural Losses
- * Reduce Private Property Landscape Damage
- * Stabilize Ecology of Town Land
- * Reduce a Principal Vector of Lyme Disease

Town Goal

- * The Town's goal is to balance deer with their habitat, human land uses and recreational interests. Ecological concerns and the needs of landowners, hunters, and other interest groups must be considered.

Strategy

The initial recommendation calls on the Town to encourage and facilitate hunting on private property. Owners of smaller acreage can form collective groups with their neighbors. The neighbors can give permission to waive the DEC rule that prohibits hunters from discharging their weapons within 500 feet of an occupied structure.

During the regular season, hunting can occur per normal DEC regulations on single owner or group property of sufficient acreage. The groups can also apply to the DEC for nuisance permits which might allow hunting at other times. The Town will aid private property owners by providing information on how to obtain the permits and which deer reduction methods have proved effective. The Town might maintain a list of hunters with whom the land-owner can contract for hunting services.

The property owner has the right to keep the deer meat or make any other arrangement with the hunter. The Town will also provide information on how the property owner can donate the meat to local food pantries.

Scope and Limits for the Initial Recommendation

We cannot accurately predict citizen participation or the number of nuisance permits that the DEC will grant, so we cannot estimate how implementation of this strategy will affect the herd's size. Full understanding and significant participation by the public may take several years. The Town will ask the DEC for their fullest cooperation and guidance.

An allied goal of the subcommittee will be to increase the accuracy of our statistics so that management decisions will be well informed.

The Town should coordinate all Town departments involved in deer removal and estimated deer population (Highway Department/Police/Natural Resources) to provide accurate statistics concerning herd population and deer mortality from all causes; and where necessary, similar statistics should be obtained from other governmental agencies (DOT and DEC) for the purpose of having accurate statistics from all sources. We recommend that the Natural Resources Department assimilate and maintain all deer related statistical information.

Summary of Statistics and Hypotheses

The subcommittee has retrieved statistics from numerous sources on the size of the herd and the mortality of deer. Some statistics, such as number of deer taken by hunters in East Hampton as reported by the DEC, can be accepted as reasonably accurate. Some statistics, such as the natural mortality rate, are only a rough estimate based on statistics from studies done in other regions of the country.

Based on 2009's reported mortality from hunting and vehicle collisions, the statistics imply that a herd size of around 4,000 deer might have a stable population. The herd size in East Hampton may be close to that number. But, this stability comes with the alarming statistic that 443 dead deer were found after vehicle collisions in 2009. Many more deer are mortally injured but die in the woods, and those are not counted by the Highway or Police personnel who pick-up dead deer along the roads.

The same statistics imply that to significantly reduce the deer herd by 25 percent in one year would require culling of 800 to 900 deer in addition to the deer taken by hunters on public lands during the hunting season.

Hunting on private property can become an important part of a program to stabilize and/or reduce herd size, but it may not be sufficient. The goals and strategies of the deer management program will require updates and annual reviews.

Adopted by Unanimous Vote January 20, 2011

Len Czajka, Chair Deer Management Subcommittee

Zachary Cohen, Chair Nature Preserve Committee

Summary of Statistics and Hypotheses

In 2006, Frank Verret of Wildlife Biometrics made a distance survey of the size of the herd in East Hampton. His mid-point estimate was 3,293 (the 90% confidence range was between 2,423 deer and 4,445).

Anecdotal evidence implies that the herd size has increased somewhat since then. Larry Penny, the Town's Head of the Natural Resources Department says that a conservative estimate is that there are now (in 2010) between 3,000 and 4,000 deer.

The average number of deer taken per year in the ten years from 1990 to 1999 was 272. The average taken in the 10 years from 2000 to 2009 increased to 385 per year. The highest count of 475 was last year (October 2009 through January 2010).

The number of hunting licenses held by residents of East Hampton has actually decreased in recent years. Based on the hunting sign-up sheets, only about 33% of the available time slots for fire-arm hunting in January are being utilized. An increasing number of deer taken by fewer hunters who are hunting less hours implies that more deer are living on the hunted properties.

Deer are also killed in collisions with vehicles. The Town Highway department removes dead deer from the highway right-of-way. The number of deer removed by the Town in 2008 was 334, and was 231 in 2009. The Village of East Hampton Highway department removes an additional 12 deer per year. These numbers do not include the significant number of deer that are mortally injured in vehicle collisions, but which die undiscovered some distance from the road. The Town statistics also do not include deer hit along the New York State Routes 27 (Montauk Highway) and 114. New York State estimates an additional 200 dead deer annually are picked-up from these two State roads.

Based on scientific articles available on the internet, the percent of the herd that must die each year to maintain a stable size ranges from 28 to 40 percent. The percentage is affected by the quality and quantity of food sources, the climate, and relative size of the herd in relation to the available food. The East Hampton environment, in most hamlets, provides a favorable habitat for deer.

We have not yet found good statistics that estimate the percent of the herd that die from natural causes in East Hampton. Studies of the natural mortality rate in other regions show dramatically varying rates depending on sex and age of the deer. The rate can be as low as 1 percent for middle aged females (3 to 4 years old) but can be as high as 35 percent for second year and old males (upwards of ten years old). A good estimate is vital to determine the amount of annual reduction by hunting or other means needed to reach any stated goal of size maintenance or reduction.

An allied goal of the program will be to determine accurate statistics for deer population and all forms of mortality.

Appendix Links

Aerial Infrared (FLIR) Deer Survey Brookhaven National Laboratory, Brookhaven, NY; Susan Bernatas, Vision Air Research Inc.; April 26, 2010

An Evaluation of Deer Management Options; the New England Chapter of The Wildlife Society
http://www.state.nj.us/dep/fgw/pdf/deer_mgt_options.pdf

Environmental Assessment An Integrated Wildlife Damage Management Approach for the Management of White-tailed Deer Damage in the State of New York; USDA Animal and Plant Health Inspection Service Wildlife Services; January 2003

Final Environmental Assessment Amended White-Tailed Deer Management Program, US Fish and Wildlife Service, Long Island Refuge Complex, Wertheim National Wildlife Refuge, Shirley, NY; April 24, 2007

Finding of No significant Impact and Decision, An Integrated Wildlife Damage Management Approach for the Management of White-tailed Deer Damage in the State of New York, USDA Animal and Plant Health Inspection Service Wildlife Services; Charles SW. Brown; February 6, 2003

Managing Urban Deer in Connecticut webpage: <http://www.ct.gov/dph/lib/dph/urbandeer07.pdf>

New York Sharpshooter Certification and Standard Operating Procedure for Wildlife Removal in Urban/Suburban Areas or Airports Using Large Caliber Rifles and Shotgun Slugs; USDA Animal and Plant Health Inspection Service Wildlife Services; January 9, 2008

New York State Department of Environmental Conservation Deer Management Program webpage: <http://www.dec.ny.gov/animals/7211.html>

Village of Cayuga Heights, New York Deer Population Control webpage: <http://www.cayuga-heights.ny.us/deer.html>

White-Tailed Deer population Estimates in the Town of East Hampton, New York; Frank Verret of Wildlife Biometrics; October 20 2006

White-tailed Deer Survey for Brookhaven National Laboratory, Wertheim National Wildlife Refuge and Rocky Point Wilderness Area, Long Island, NY; Susan Bernatas, Vision Air Research Inc.; May 7, 2004

SEQRA

**TOWN OF EAST HAMPTON
ENVIRONMENTAL ASSESSMENT FORM
PART I**

(To be completed by the applicant and accompanied by a survey showing location of project or action, including elevations).

The purpose of this Environmental Assessment Form is to provide information, which will assist the Town in determining whether the action you propose may have a significant impact or effect on the environment. Answers to these questions will be considered as part of the application for approval and may be subject to further verification and public review. Please complete the entire form leaving no blanks. If a question does not apply, please indicate so.

The information provided herein will be reviewed relative to the criteria of Part II, which is to be completed by an agency of the Town. In providing any additional information you believe would assist the agency in completing Part II, this review process may be expedited.

TOWN REVIEWING AGENCY: Town Board

PROJECT TITLE: Deer Management Plan

SITE PLAN:

STREET: all town streets

SUBDIVISION WAIVER:

SCHOOL DISTRICT: all town school districts

SUBDIVISION:

ZONING DISTRICT: all town zoning districts

SUFFOLK COUNTY TAX MAP #: all town tax map numbers

SPECIAL PERMIT:

ZONE CHANGE:

OTHER: Management Plan

APPLICANT/SPONSOR

Name: East Hampton Town Board
Address: 159 Pantigo Road
PO & Zip #: East Hampton, NY 11937
Telephone #: 631-324-4141

APPLICANT'S ATTORNEY

Name: John Jilnicki
Address: 159 Pantigo Road
PO and Zip #: East Hampton, NY 11937
Telephone #: 631-324-8787

DESCRIPTION OF PROJECT:

The Town Board recognizes that the white-tailed deer (*Odocoileus virginianus*) in East Hampton has increased to a level that demands a comprehensive plan that includes an accurate estimate of the population, an analysis of its impacts and an outline for management. A survey conducted for the town in 2006 found that the deer population at that time was already in excess of the number that is generally acceptable to wildlife managers in the eastern United States. Anecdotal evidence and the general consensus of residents as well as indicators such as the number of deer/vehicle accidents, numbers of tick-borne diseases, private property damage and the field observations of native habitats by town staff suggest that the population has increased since 2006.

The proposed deer management plan includes an assessment of the current deer

population, possible actions to reduce the population, provisions for deer monitoring and public communication, potential adjustments to state and local laws and plans for long term management and monitoring.

A. SITE DESCRIPTION

Physical setting of overall project, both developed and undeveloped areas.

1. Present Land Use: all land uses are included

Urban Industrial Commercial Residential
Forest Agricultural Rural (non-farm) (suburban)
Other

2. Total Acreage of Project Area: whole town- approximately 31,000 acres

APPROXIMATE ACREAGE	PRESENTLY	AFTER COMPLETION
Meadow or Brushland (non-agricultural)	_____ acres	_____ acres
Forested	_____ acres	_____ acres
Agricultural includes orchards, pasture, cropland, etc. - as much as	_____ acres	_____ acres
Wetland (freshwater or tidal as per Articles 24,25 of ECL	_____ acres	_____ acres
Water Surface Area	_____ acres	_____ acres
Unvegetated (rock, earth or fill)	_____ acres	_____ acres
Roads, buildings, other paved surfaces	_____ acres	_____ acres
Other (indicate type)	_____ acres	_____ acres

3. What is the predominant soil type(s) on project site? All soil types are included

a. Soil drainage: well drained: _____ % of site
moderately well drained: _____ % of site
poorly drained: _____ % of site

b. If any agricultural land is involved, how many acres of soil are classified within soil group 1 though 4 of the New York Land Classification System? (See 1 NYCRR 370).

4. Approximate percentage of proposed project site with slopes: all slopes are included

_____ 0-15% slopes: _____ % of site
_____ 10-15% slopes: _____ % of site
_____ 15% or greater: _____ % of site

5. Is project substantially contiguous to, or contain a building, site or district, listed on the State or the National Registers of Historic Places? The town contains a number of buildings that are listed on the State and National Registers of Historic Places.

6. Is project substantially contiguous to a site listed on the Register of National Natural Landmarks? Big Reed Pond is the town's only National Natural Landmark.

7. What is the depth to the water table? All depths to groundwater are included.

8. **Is site located over a primary, principal or sole source aquifer?** The whole town is located over a sole source aquifer.
9. **Do hunting, fishing or shellfishing opportunities presently exist in the project area?** Yes.
10. **Does project site contain any species of plant or animal life that is identified as threatened or endangered?** Yes. The town contains numerous species that are identified by NYS as threatened or endangered.
11. **Are there any unique or unusual land forms on the project site? (i.e., cliffs, dunes or other geological formations)?** Yes. The town contains beaches, dunes, bluffs, kettleholes, glacial erratic and other unique landforms.
12. **Is the project site presently used by the community or neighborhood as an open space or recreation area?** Yes. Large areas of the town are uses as open space or recreational areas including State & County Parkland as well as town-owned and privately-owned properties.
13. **Does the present site include scenic views known to be important to the community?** Yes. The town contains many areas that are designated to be Scenic Areas of Statewide and/or Local Significance.
14. **Streams within or contiguous to project area:** The town contains freshwater streams as well as tidal creeks.
15. **Lakes, ponds, wetland areas within or contiguous to project area:**
The town contains numerous wetlands, ponds and lakes.
16. **Is the site served by existing public utilities?** Much of the town is served by public utilities. However, the proposed project does not involve connection to any public utilities.
17. **Is the site located in an agricultural district certified pursuant to Agricultural and Markets Law, Article 25-AA, Section 303 and 304?** The town contains properties that are certified agricultural districts.
18. **Is the site located in or substantially contiguous to a Critical Environmental Area designated pursuant to Article 8 of the ECL, and 6 NYCRR 617?** A portion of the Peconic Estuary Critical Environmental area is located within the town.
19. **Has the site ever been used for the disposal of solid or hazardous wastes?** Some areas of the town have been used for the disposal of

solid or hazardous wastes.

B. PROJECT DESCRIPTION The proposed is for the adoption of a Deer Management Plan. Physical alterations to the land are not proposed. Therefore questions 1-23 do not apply.

1. Physical dimensions and scale of project (fill in dimensions as appropriate)

- a. Total contiguous acreage owned or controlled by project sponsor:
- b. Project acreage to be developed: _____ ultimately
- c. Project acreage to remain undeveloped: _____ acres
- d. Length of project in miles (if appropriate): _____ linear feet
- e. If the project is an expansion, indicate percent of expansion _____ %
- f. Number of off-street parking spaces: _____ existing _____ proposed
- g. Maximum vehicular trips generated per hour upon completion of project: _____ trips
- h. If residential: Number and type of housing units:
 _____ One Family _____ Two Family _____ Multiple Family
 _____ Condominium
 _____ Initially _____ Ultimately
- i. Dimensions (in feet) of largest proposed structure:
 height: _____ width: _____ length: _____
- j. Linear frontage along a public thoroughfare project will occupy: _____ feet

2. How much natural material (i.e., rock, earth, etc.) will be removed from site?

_____ cubic yards _____ yards

3. Will disturbed areas be reclaimed?

- a. If yes, for what intended purpose is the site being reclaimed?
- b. Will topsoil be stockpiled for reclamation?
- c. Will upper subsoil be stockpiled for reclamation?

4. How many acres of vegetation (trees, shrubs, ground covers) will be removed from the site?

acres _____ (type)

5. Will any mature forest (over 100 years old) or other locally-important vegetation be removed by this project?

6. **If single phase project: Anticipated period of construction (including demolition):**
_____ months
7. **If multi-phased:**
 - a. Total number of phases anticipated: _____ (number)
 - b. Anticipated date of commencement phase 2: _____ month _____ year
 - c. Approximate completion date of final phase: _____ month _____ year. Is phase 1 functionally dependent on subsequent phases? No
8. **Will blasting occur during construction?**
9. **Number of jobs generated:**
during construction: _____
after completion: _____
10. **Number of jobs eliminated by this project?**
11. **Will project require relocation of any projects or facilities?**
If yes, explain
12. **Is surface liquid waste disposal involved?**
 - a. If yes, indicate type of waste (sewage, industrial, etc) and amount:
 - b. Name of water body into which effluent will be discharged:
13. **Is subsurface liquid waste disposal involved?**
14. **Will surface area of an existing water body increase or decrease by proposal?**

Explain:
15. **Is project or any portion of project located in a 100 year flood plain?**
16. **Will the project involve construction and/or demolition debris?**
 - a. If yes, estimate the type: _____ and quantity:
17. **Will the project generate or involve wastes requiring special handling?**

If yes, describe the method of disposal:

18. Will project use herbicides or pesticides?

19. Will project routinely produce odors (more than one hour/day)?

20. Will project operating noise exceed local ambient noise levels?

21. Will project result in an increase in energy use?

If yes, indicate type(s):

22. If water supply is from wells, indicate pumping capacity:

_____gallons/minute

23. Total anticipated water usage per day: _____gallons/day

24. Does project involve Local, State or Federal funding? No.

If yes, explain:

25. Approvals Required:

Approvals Required	Yes	No	Type	Submittal Date
Town Board	X		resolution	
Town Planning Board				
Town Zoning Board				
County Health Department				
County Planning Comm.				
Other County Agencies				
State DEC	X			
Federal Agencies				
Town Trustees				
Architectural Review Bd.				

C. ZONING AND PLANNING INFORMATION

1. Does proposed action involve a planning or zoning decision? No.

EAF Part I

If yes, indicate decision required:

2. **What is the zoning classification(s) of the site?** N.A.

3. **What is the maximum potential development of the site if developed as permitted by the present zoning?** N.A.

4. **What is the proposed zoning of the site?** N.A.

5. **What is the maximum potential development of the site if developed as permitted by the proposed zoning?** N.A.

6. **Is the proposed action consistent with the recommended uses in adopted local land use plans?** Yes. The plan is consistent with the goals of the Town Comprehensive Plan that recognize the importance of a healthy, diverse environment.

7. **What are the predominant land use(s) and zoning classifications within a 1/4 mile radius of proposed action?** The plan is for the entire town.

8. **Is the proposed action compatible with adjoining/surrounding land uses within 1/4 mile?** The plan is for the entire town.

9. **If the proposed action is the subdivision of land, how many lots are proposed?** N.A.
 - a. Number of lots:
 - b. Minimum lot size proposed:

10. **Will the proposed action require any authorization(s) for the formation of sewer or water districts?** No.

11. **Will the proposed action create a demand for any community provided services (recreation, education, police, fire protection)?** The plan will not create a new demand for the above services. It will help to provide recreational opportunities and educational services.
 - a. If yes, is existing capacity sufficient to handle projected demand?

12. **Will the proposed action result in the generation of traffic significantly above present levels?** No.

EAF Part I

- a. If yes, is the existing road network adequate to handle the additional traffic?

D. INFORMATIONAL DETAILS

Attach any additional information as may be needed to clarify your project. If there are or may be any adverse impacts associated with your proposal, please discuss such impacts and the measures which you proposed to mitigate or avoid them.

E. VERIFICATION

I certify that the information provided above is true to the best of my knowledge.

Applicant/Sponsor Name: William Wilkinson, Town Supervisor Date: _____

Signature: _____ Date: _____

Note: This document shall not be considered official until and unless it has been signed by the responsible official of the lead agency.

**TOWN OF EAST HAMPTON
NEW YORK 11937
ENVIRONMENTAL ASSESSMENT FORM
PART II
(To be completed by Lead Agency)**

TOWN REVIEWING AGENCY: Town Board

=====

PROJECT TITLE: Deer Management Plan

STREET: all Town Streets

SCHOOL DISTRICT: all Town School Districts

ZONING DISTRICT: all Town Zoning Districts

SUFFOLK COUNTY TAX MAP: all Town tax map parcels

- SITE PLAN**
- SUBDIVISION WAIVER**
- SUBDIVISION**
- SPECIAL PERMIT**
- ZONE CHANGE**
- VARIANCE**
- NATURAL RESOURCES SPECIAL PERMIT**
- OTHER - Comprehensive Deer Management Plan**

APPLICANT: East Hampton Town Board

**ADDRESS: 159 Pantigo Road
East Hampton, NY 11937**

TELEPHONE: 631-324-4141

COMMENTS:

The Town Board recognizes that the white-tailed deer (*Odocoileus virginianus*) in East Hampton has increased to a level that demands a comprehensive plan that includes an accurate estimate of the population, an analysis of its impacts and an outline for management. A survey conducted for the town in 2006 found that the deer population at that time was already in excess of the number that is generally acceptable to wildlife managers in the eastern United States. Anecdotal evidence and the general consensus of residents as well as indicators such as the number of deer/vehicle accidents, numbers of tick-borne diseases, private property damage and the field observations of native habitats by town staff suggest that the population has increased since 2006.

The proposed deer management plan includes an assessment of the current deer population, possible actions to reduce the population, provisions for deer monitoring and public communication, potential adjustments to state and local laws and plans for long term management and monitoring.

POSSIBLE IMPACT ON LAND

1. Will there be a significant adverse impact as a result of physical change to the project site?

Yes

No

The Deer Management Plan is a comprehensive management plan which is intended for adoption into the Town Comprehensive Plan. It includes a general discussion of the issues involved in management of the Town's white-tailed deer population and a listing of potential actions to address the problems that have been brought to the Town Board's attention. The plan is a proposal for the management of white-tailed deer within East Hampton in accordance with the goals of the Town's Comprehensive Plan. It is not a plan to reduce the incidence of Lyme disease or any other disease.

The Town Board has authorized an aerial infrared survey for the purpose of estimating deer numbers. This action requires no SEQRA review. The data obtained from the survey will be analyzed and discussed with state and federal wildlife professionals to select specific actions from the Deer Management Plan and develop detailed plans for each selected action. Some of the actions discussed in the Deer Management Plan will require further SEQRA review before they can be implemented. However, none of the actions contained in the plan are expected to involve significant physical changes to the land.

2. Will there be a significant adverse impact to any unique or unusual landforms on the site?

Yes No

Freshwater wetlands are found throughout the Town and our shorelines contain significant dune formations and bluffs. Additional geological features such as glacial kettleholes and erratics are also found in many areas of the Town. The value of these features is discussed in the Town's Comprehensive Plan and expressed in the regulations of the Town Code. Proper management of the Town's white-tailed deer population will not impact the integrity of the features and is expected to help protect them by reducing the impacts to the vegetation that grows on them.

POSSIBLE IMPACT ON WATER

3. Will there be a significant adverse impact to any water body designated as protected?

Yes No

Management of the Town's deer population is only expected to help maintain or improve the quality of the Town's water bodies by protecting the native vegetative communities from over browsing. Native vegetation buffers, filters and reduces surface water runoff that flows into protected surface waters.

4. Will there be a significant adverse impact to any non-protected existing or new body of water?

Yes No

See response to question #3.

5. Will there be a significant adverse impact to surface or groundwater quality?

Yes No

Field observations by Town staff indicate that overbrowsing by deer has reduced and in some areas nearly eliminated understory trees and native herbaceous vegetation. Management of the deer population will facilitate recovery of the Town's forests and can only help to restore their natural filtering functions.

6. Will there be a significant adverse impact as a result of altered drainage flow patterns or surface water runoff?

Yes No

The plan does not propose clearing, grading, paving, construction or any other activities that would alter drainage flow patterns or increase surface water runoff.

POSSIBLE IMPACT ON AIR QUALITY

7. Will there be a significant adverse impact to air quality?

Yes No

POSSIBLE IMPACT ON PLANTS/ANIMALS

8. Will there be a significant adverse impact to any threatened or endangered species?

Yes No

The adverse impacts of high white-tailed deer populations on herbaceous plant species, including threatened and endangered species has been well documented in the scientific literature (Anderson, et.al. 2001, Augustine & Frelich 1998, Fletcher, et.al. 1998, Waller & Alverson 1997). Field observations by town staff indicate that populations of native wildflowers have declined in areas of town that also appear to be

heavily browsed by deer. Management of the deer population could facilitate the recovery of some populations of threatened and endangered plant species in East Hampton.

9. Will there be a significant adverse impact to non-threatened or non-endangered species?

Yes No

The impacts of deer on native ecosystems are well documented and discussed extensively in the scientific literature (Anderson, et.al. 2001, Aronson & Handel, 2011, Augustine & Frelich 1998, Baiser, et.al. 2008, deCalesta & Stout 1997, Fletcher, et.al. 1998, Hanberry, et.al. 2006, McShea & Rappole 2000, Rawinski, 2008, Russell, et. al. 2001, Stromayer and Warren, 1997, Tymkiw, 2010, Waller & Alverson 1997, Williams & Ward, 2006). Waller & Alverson (1997) identified the white-tailed-deer as a keystone herbivore that:

- (1) Affects the distribution or abundance of many other species,
- (2) Can affect community structure by strongly modifying patterns of relative abundance of many other species, or
- (3) Affects community structure by affecting the abundance of species at multiple trophic levels.

Adoption of the proposed deer management plan will allow town staff along with NYSDEC wildlife managers to evaluate the role of white-tailed deer in ecosystems throughout the town and select actions that will help to maintain and/or restore our native biodiversity.

POSSIBLE IMPACT ON AGRICULTURAL LANDS

10. Will there be a significant adverse impact to agricultural land resources?

Yes No

Crop damage by deer is evidenced by the number of high fences and electric fences that have been erected in all of the town's agricultural areas to protect nursery stock, farm stand vegetables and other produce. Proper management of the town's deer population will help to reduce the need for such fences and may help to increase crop yields on unfenced property.

POSSIBLE IMPACT ON AESTHETIC RESOURCES

11. Will there be a significant adverse impact to aesthetic resources?

Yes No

The Architectural Review Board has seen a significant increase in the number of requests for deer fences to protect residential properties in recent years. Additional fences appear to have been erected throughout the town without permits. Such fences adversely impact scenic vistas, roadways and community character. Proper management of the town's deer population will help to reduce the need for high fences.

POSSIBLE IMPACT ON HISTORIC RESOURCES

12. Will there be a significant adverse impact to any site or structure of historic, prehistoric or paleontological importance?

Yes No

The proposed deer management plan will not impact historic structures or subsurface resources in any way. However, management of the deer population may allow the restoration and maintenance of historic landscaping on some sites.

POSSIBLE IMPACT ON OPEN SPACE AND RECREATION

13. Will there be a significant adverse impact to the quality and quantity of existing or future open space or recreational opportunities?

Yes No

Deer hunting is a traditional recreational activity in East Hampton. Adoption of the proposed deer

management plan will allow town staff to work with NYSDEC wildlife managers to insure that healthy deer herds continue to exist throughout the town. The healthy and diverse native ecosystems proposed by this plan are also an important part of the recreational experience for hikers, bird watchers, wildflower viewers, horseback riders, mountain bikers and other groups that use and appreciate the town's many open space areas.

POSSIBLE IMPACT ON TRANSPORTATION

14. Will there be a significant adverse impact to existing transportation systems?

Yes No

Town police reports indicate that deer collisions have increased from 25 in 2000 to 108 in 2011, an increase of over 400%. The proposed comprehensive management plan includes actions to address this problem, including reduction of the deer population, communication and outreach actions and an evaluation of the roadside reflector program.

POSSIBLE IMPACT ON ENERGY

15. Will there be a significant adverse impact to the community's sources of fuel or energy supply?

Yes No

POSSIBLE IMPACT ON NOISE

16. Will there be objectionable odors, noise, glare, vibration or electrical disturbance as a result of this project?

Yes No

POSSIBLE IMPACT ON HEALTH AND HAZARDS

17. Will there be a significant adverse impact to public health and safety?

Yes No

It was stated at the public hearing that a reduction in the deer herd could cause ticks to use humans as hosts. However, people already function as hosts for ticks. Adult ticks, climb tall grass or shrubs and will latch onto any large animal that they can reach. It has also been suggested that a reduction in the number of deer might reduce tick numbers by reducing opportunities for tick feeding and breeding.

The proposed comprehensive management plan is not a plan to reduce the incidence of Lyme disease or any other disease. The relationship between deer populations and the incidence of tick-borne diseases is not clear and is the subject of on-going scientific research. However, it is possible that there is a link between the increase in the numbers of white-tailed deer and incidences of tick borne diseases so that proper deer management could result in public health & safety benefits. Attached is a list of references containing detailed discussions of this issue.

POSSIBLE IMPACT ON GROWTH AND CHARACTER OF THE COMMUNITY OR NEIGHBORHOOD

18. Will there be a significant adverse impact to the character of the existing community?

Yes No

The proposed management plan will have a beneficial impact on community character by reducing the need for high fences that interfere with open vistas and by facilitating the recovery of ornamental plantings on residential and commercial properties and the regeneration of native plant communities.

19. Is there or is there likely to be controversy related to the potential environmental impacts?

Yes No

A public hearing was held December 6, 2012 for the Draft Deer Management Plan. The hearing was held open for 30 days for the receipt of written comments. Numerous comments were received. These are summarized in the attached memo from the Town Planning Director. The Town Board discussed the public hearing comments at the ***** work session meeting and the Board's response to the comments is reflected in the answers to the above questions.

CONCLUSION:

Determination of Significance

- One or more potentially significant adverse environmental impacts have been identified which may result from the proposed project. A Positive Declaration is hereby made pursuant to SEQRA and Chapter 128 of the East Hampton Town Code.
- One or more potentially significant adverse environmental impacts have been identified which may result from the proposed project. However, by incorporating the mitigated measures identified in this Environmental Assessment Form, these potentially significant adverse impacts may be avoided. A Conditioned Negative Declaration is hereby made pursuant to SEQRA and Chapter 128 of the East Hampton Town Code.
- No potentially significant adverse environmental impacts resulting from the proposed project have been identified. A Negative Declaration is hereby made pursuant to SEQRA and Chapter 128 of the East Hampton Town Code.

NAME OF LEAD AGENCY: East Hampton Town Board

William Wilkinson
Print Name of Responsible Officer in Lead Agency

Town Supervisor
Title of Responsible Officer


Signature of Responsible Officer in Lead Agency

5/9/13
Date

Questions #8 & 9 - Ecology

- Anderson, R.C., E.A. Corbett, M. R. Anderson, G. A. Corbett and T. M. Kelley, 2001. High white-tailed deer density has negative impact on tallgrass prairie forbs. *Journal of the Torrey Botanical Society* 128: 381-392.
- Aronson, M. F. J. and S. N. Handel, 2011. Deer and Invasive Plant Species Suppress Forest Herbaceous Communities and Canopy Tree Regeneration. *Natural Areas Journal* 31: 400-407.
- Augustine, D.J. and L.E. Frelich, 1998. Effects of White-Tailed Deer on Populations of an Understory Forb in Fragmented Deciduous Forests. *Conservation Biology* 12:995-1004.
- Baiser, B., J. L. Lockwood, D. LaPuma and M.F.J. Aronson, 2008. A perfect storm: two ecosystem engineers interact to degrade deciduous forests of New Jersey. *Biol Invasions* 10: 785-795.
- deCalesta, D. S. and S. L. Stout, 1997. Relative Deer Density and Sustainability: A Conceptual Framework for Integrating Deer Management with Ecosystem Management. *Wildlife Society Bulletin* 25: 252-258.
- Fletcher, J.D, L.A. Shipley, W.J. McShea, D.L. Shumway, 2001. Wildlife Herbivory and rare plants: the effects of white-tailed deer, rodents and insects on growth and survival of Turk's cap lily. *Biological Conservation* 101: 229-238.
- Hanberry, P., S. Demarais and B. D. Leopold, 2006. Long-Term Impact of White-tailed Deer on Community Structure and Biodiversity in Mississippi: Year 5. Federal Aid in Wildlife Restoration Project W-48, Study 64 Final Report, Department of Wildlife and Fisheries Mississippi State University.
- McShea and J. H. Rappole, 2000. Managing the Abundance and Diversity of Breeding Bird Populations through Manipulation of Deer Populations. *Conservation Biology* 14: 1161-1170.
- Rawinski, T. J., 2008. Impacts of White-Tailed Deer Overabundance in Forest Ecosystems: An Overview. Northeastern Area State and Private Forestry Forest Service, U.S. Department of Agriculture, Newtown Square, PA.
- Russell, F. L., D. B. Zippin and N. L. Fowler, 2001. Effects of White-Tailed Deer (*Odocoileus virginianus*) on Plants, Plant Populations and Communities: A Review. *American Midland Naturalist* 146: 1-26.
- Stromayer, K. A. K. and R. J. Warren, 1997. Are overabundant deer herds in the eastern United States creating alternate stable states in forest plant communities? *Wildlife Society Bulletin* 25: 227-234.
- Tymkiw, E.L., 2010. The effect of white-tailed deer density on breeding songbirds in Delaware. MS thesis University of Delaware.
- Waller, D. M. and W. S. Alverson, 1997. The white-tailed deer: a keystone herbivore. *Wildlife Society Bulletin* 25: 217-226.
- Williams, S. C. and J. S. Ward, 2006. Exotic Seed Dispersal by White-tailed Deer in Southern Connecticut. *Natural Areas Journal* 26:383-390.

Question #17- Tick-borne Diseases

- Tale of the Tick: How Lyme Disease is Expanding Northward by Dave Mance, III.
http://northernwoodlands.org/articles/article/tale_of_the_tick_how_lyme_disease_is_expanding_northward/
- Ticks and Lyme Prevention. <http://www.deeralliance.com/node/10>
- Well, Bambi's Cousins are all here. What Now? By Woody Hochswender
http://www.nytimes.com/2008/03/23/nyregion/nyregionspecial2/23colct.html?_r=3&ref=nyregionspecial2&oref=slogin&
- Evidence That Deer Population Reduction Prevents Lyme Disease and Environmental Destruction by the Connecticut Coalition to Eradicate Lyme Disease.
<http://www.eradicate.lymedisease.org/info.html>
- D. C. Duffy, S. R. Campbell, D Clark, C DiMotta and S Gurney, 1994. *Ixodes scapularis* (Acari: Ixodidae) Deer Tick Mesoscale Populations in Natural Areas: Effects of Deer, Area, and Location. *J. Med. Entomo.* 31: 152-158.

http://www.academia.edu/1378459/Ixodes_scapularis_Acari_Ixodidae_deer_tick_mesoscale_populations_in_natural_areas_effects_of_deer_area_and_location

Are Deer the Culprit in Lyme Disease? By The Editors

<http://roomfordebate.blogs.nytimes.com/2009/07/29/are-deer-the-culprit-in-lyme-disease/>

R. S. Ostfeld, Lyme Disease, The Ecology of a Complex System. Oxford University Press.

<http://bloomington.in.gov/media/media/application/pdf/8023.pdf>

T. Levia, A. M. Kilpatrick, M. Mangel and C. C. Wilmsers, 2012. Deer, predators and the emergence of Lyme disease. <http://www.lymeneteurope.org/forum/viewtopic.php?f=5&t=3916>

Lyme and other Vector-borne Disease Information. By Maine Medical Center Research Institute.

<http://www.mmcri.org/home/webSubContent.php?list=webcontentlive&id=111&catID=&subCatID=19catID=4headType=lymecatLevel=subCat>

Scientists link invasive barberry to Lyme disease by Judy Benson.

<http://www.theday.com/article/20110620/NWS01/306209953/-1/NWS>