

TICK FREE MARTHA'S VINEYARD

Aerial Deer Survey Results

A Briefing & Panel Discussion

Thursday, April 30, 2026 · 2–3 PM · Ag Hall, West Tisbury

All Photos: Astrid Tilton



Aerial Deer Survey Results

A Briefing & Panel Discussion

Virginia Barbatti

MODERATOR

Executive Director

Tick Free Martha's Vineyard

Martin Feehan

Deer & Moose Biologist

MassWildlife

Patrick Roden-Reynolds

Director, MV Tick Program

Public Health Biologist, Dukes County

Joe Capece

President, MV Hunt Club

Trustee, MV Agricultural Society

Why this survey?

The reasons Tick Free MV invested in this survey early on

Deer fuel the tick crisis

White-tailed deer are the primary reproductive host for ticks — and Martha's Vineyard has a serious tick problem. The Island has long been a hotspot for Lyme disease, babesiosis, and other tick-borne diseases. Now we are seeing an explosion in Alpha-gal syndrome, a serious meat and dairy allergy linked to lone star ticks, with positive tests at Martha's Vineyard Hospital rising from 2 in 2020 to 742 in 2025.

Information enables action

MassWildlife has documented the islands as having the highest deer density in Massachusetts for years. This survey builds on that foundation by using thermal drone technology to produce a current, precise count and, critically, to map where the deer are concentrated across the island. With this investment, we put important information in the hands of our community — informing the discussions, decisions, and actions ahead.

Drone Survey Methodology

Conducted by White Buffalo, Inc. under the direction of Dr. Jason Boulanger

DJI Matrice 30T drone

Thermal imaging camera precisely detects deer by heat signature, even through dense vegetation or in low-light conditions

Systematic grid coverage

Evenly spaced parallel flight lines covering the entire island at 250 ft altitude, 15 mph

February – March 2026

Optimal conditions: leaf-off season maximizes sightlines; cold temperatures create high contrast

Dusk to dawn

Cooler nighttime air maximizes thermal contrast; pilots could hover and zoom to manually verify each deer sighting



Made Possible by the Island

Permissions were granted for more than 100 launch sites and the community was informed along the way

All Six Towns

**Wampanoag Tribe of
Gay Head (Aquinnah)**

**Conservation
Organizations**

Private Landowners

PUBLIC NOTICE: ISLAND-WIDE AERIAL DEER SURVEY

Tick Free Martha's Vineyard (Tick Free MV) will launch an Island-wide aerial deer survey from February 15–March 7, 2026, weather permitting, using thermal drones. Flights will occur dusk to dawn to collect deer population data. Operators White Buffalo, Inc. will follow FAA regulations, and takeoff and landing locations are pre-approved by landowners. Thermal imagery will only be used to identify and count deer; it does not capture identifiable images of people, faces, or property. Residents may notice nighttime drone activity. Questions: info@tickfreemv.org.

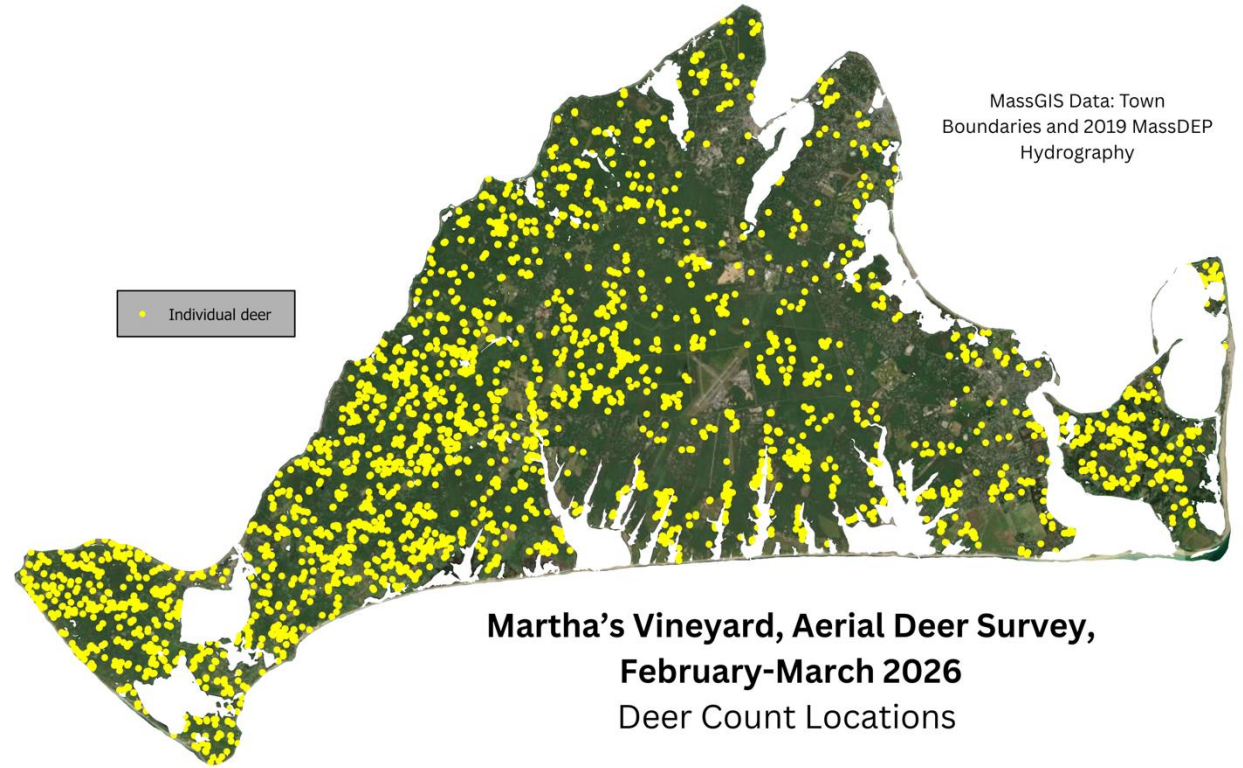
4,681 DEER COUNTED

at the lowest point in the year

Surveying was done directly after the hunting season when 934 deer were harvested and prior to spring fawning that will replenish the herd

consistent with state estimates

The results align with MassWildlife's deer density estimate of 55+ deer per square mile on Martha's Vineyard, vs. their target of 12-18 deer per square mile



For any questions reach out to info@tickfreemv.org or visit our website at tickfreemv.org

**TICK
FREE**
MARTHA'S VINEYARD

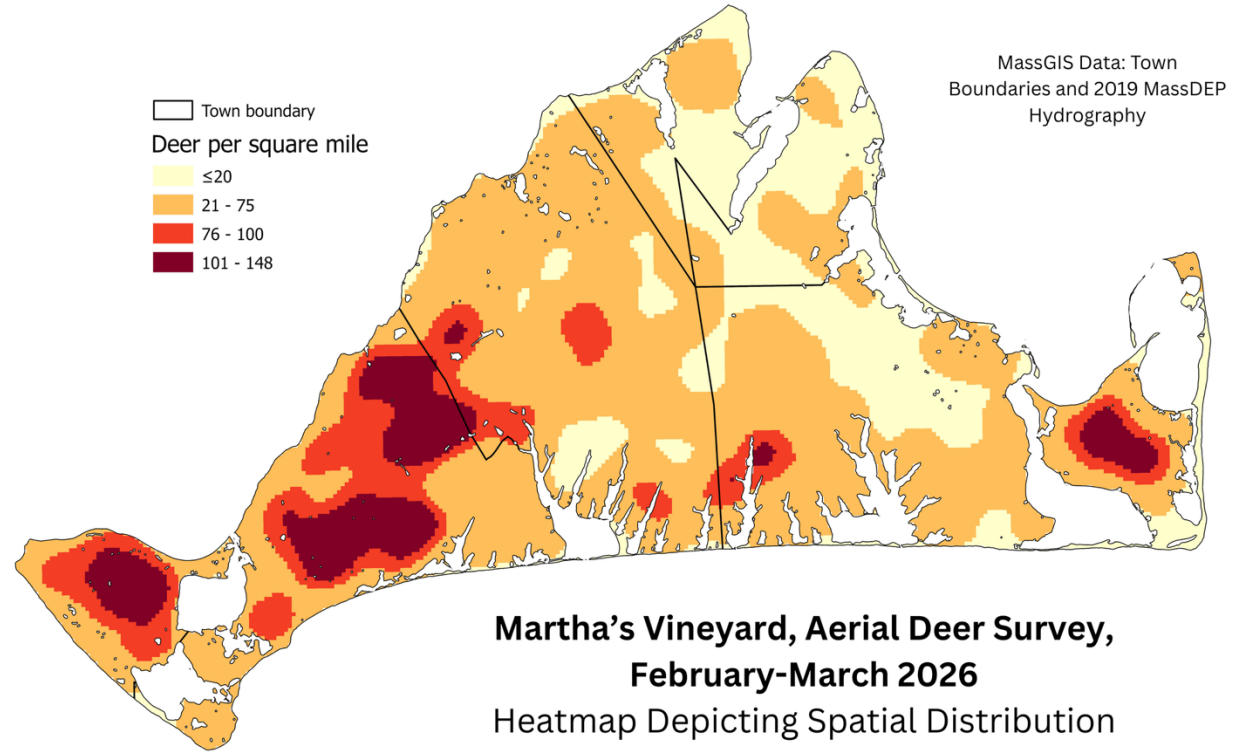
MAJOR HOTSPOTS IDENTIFIED

over 100 deer per square mile

There are multiple hot spots – primarily in Aquinnah, Chilmark, and on Chappy - with more than 100 deer per square mile counted

and high densities throughout

No part of the island is unaffected, with elevated densities in every town. It's clear that individual action will not suffice – we require collective action, Island-wide.



For any questions reach out to info@tickfreemv.org or visit our website at tickfreemv.org

Today's discussion

This panel will focus on understanding the results of the survey.

We will first hear top impressions from each panelist, then move to questions.

Beyond today

Gathering more feedback — we want to review results with all stakeholders and hear what you're thinking.

Taking science-backed, community-driven action as a part of the broader Island-Wide Tick Strategy.

Opening impressions

Martin Feehan

*What is your perspective on these results **as the deer biologist for the state?***

Patrick Roden-Reynolds

*What is your perspective on these results **as our local tick biologist?***

Joe Capece

*What is your perspective on these results **as a local hunter?***



Let's keep the conversation going

Reach out

info@tickfreemv.org

Questions, thoughts, feedback — we read everything.

Find us

tickfreemv.org

Full report & cover letter at
tickfreemv.org/deer-survey

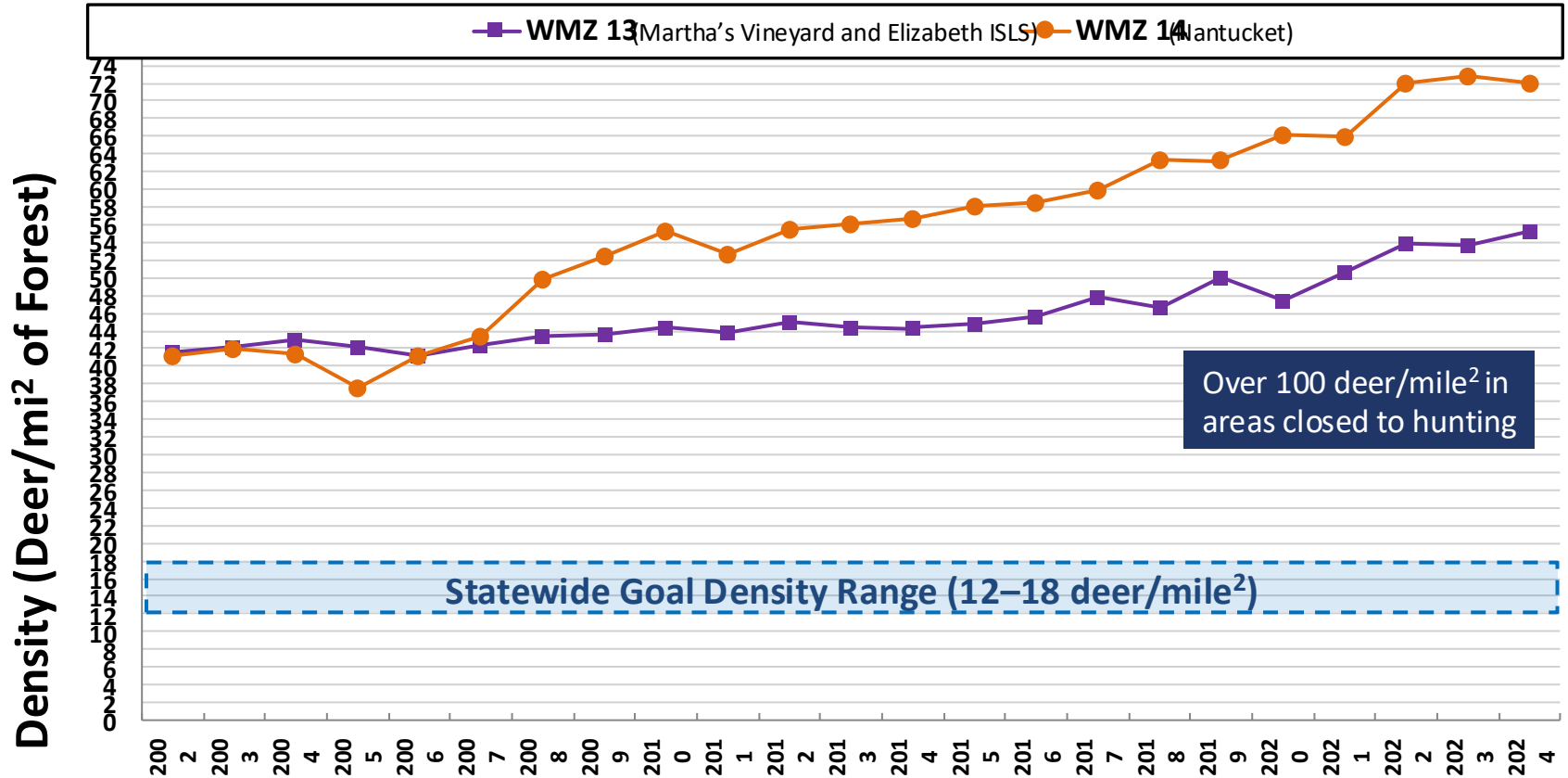
Supplemental Slides

Provided by Panelists

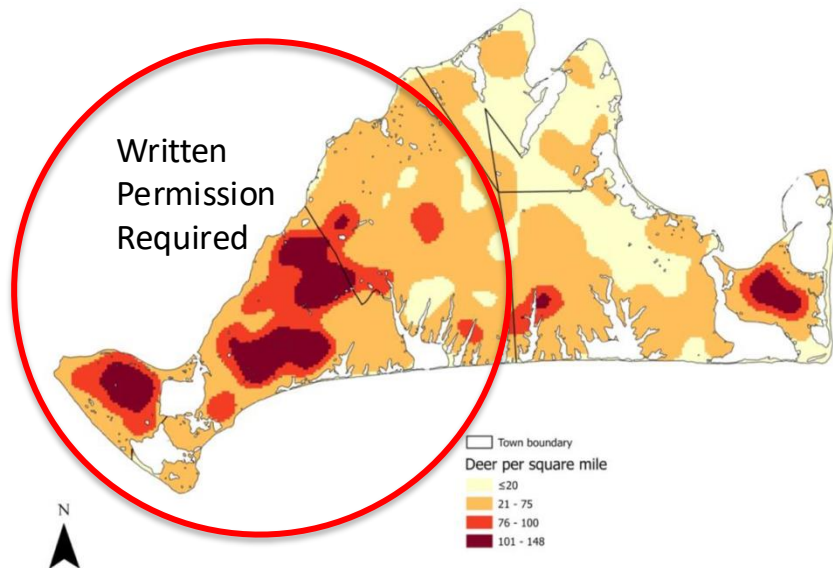
Island Impacts of Overabundant Deer



Deer Density Estimates for Areas Open to Hunting

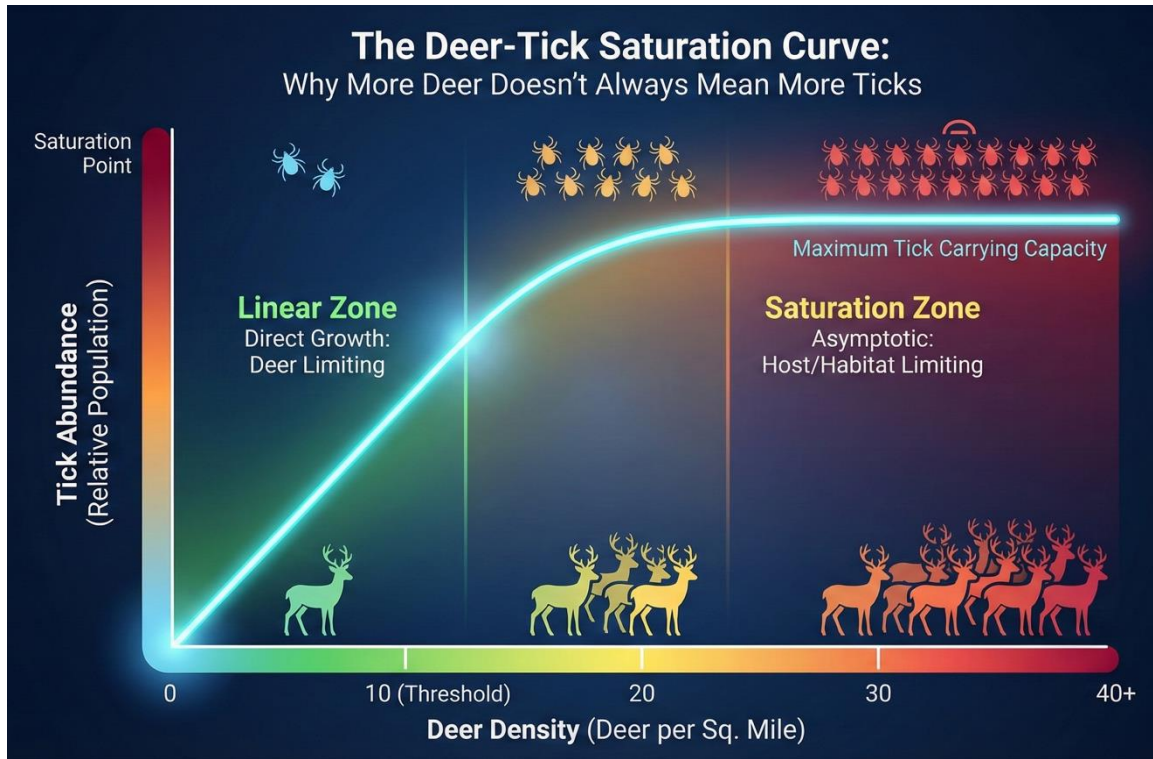


Aerial Survey Clearly Illustrated the Impact of Hunting and Bylaw Restrictions



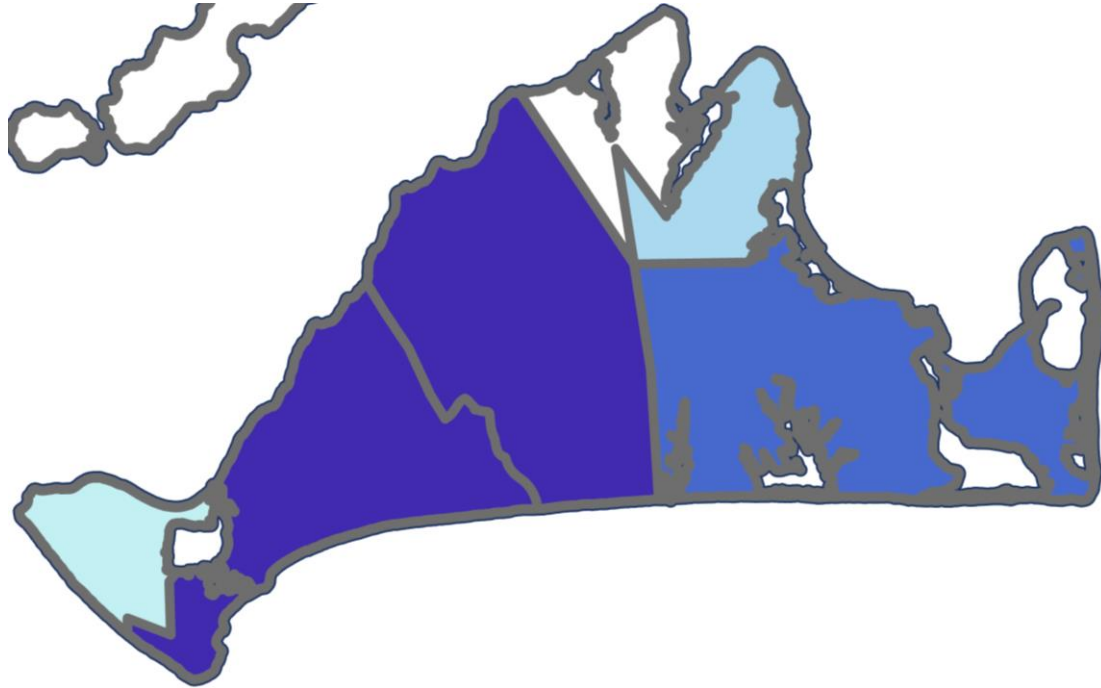
- Central portions of the island around M. F. Correlus State Park, where public hunting pressure is highest had the lowest densities
- The three towns with written permission bylaws all had higher deer densities than the towns without
- Hunting access is the most important limiting factor for deer management

Heatmap courtesy of Tick Free MV

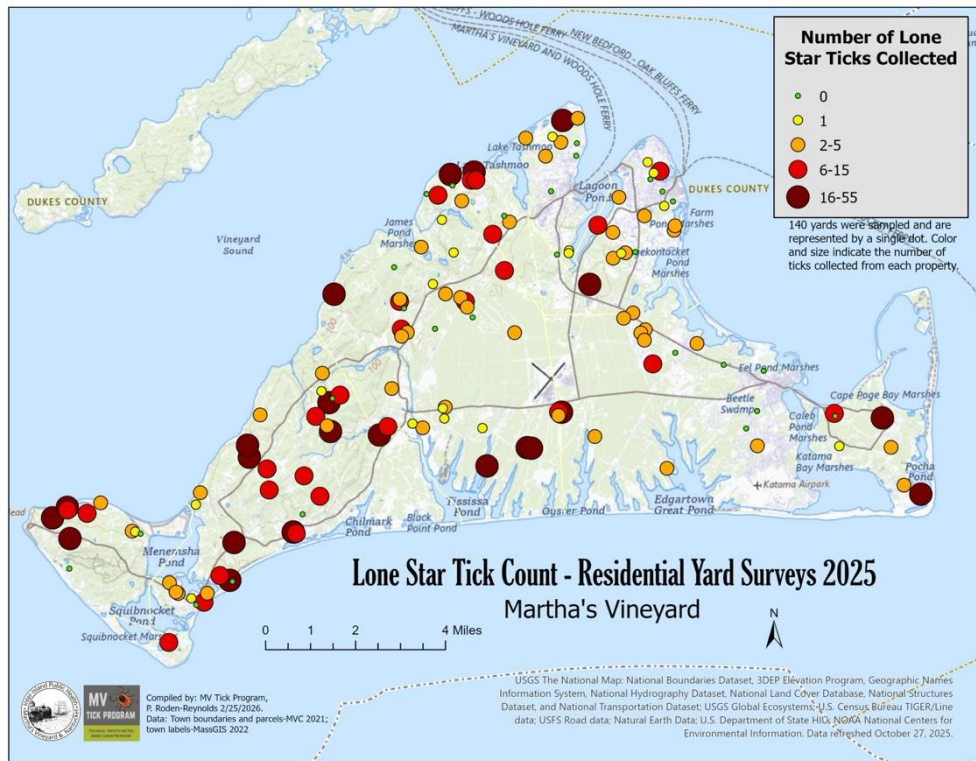


While deer reductions alone won't reduce the amount of ticks, reduced densities can make deer-targeted tick reduction strategies more efficient and effective.

MassWildlife's Hunters Share the Harvest Program



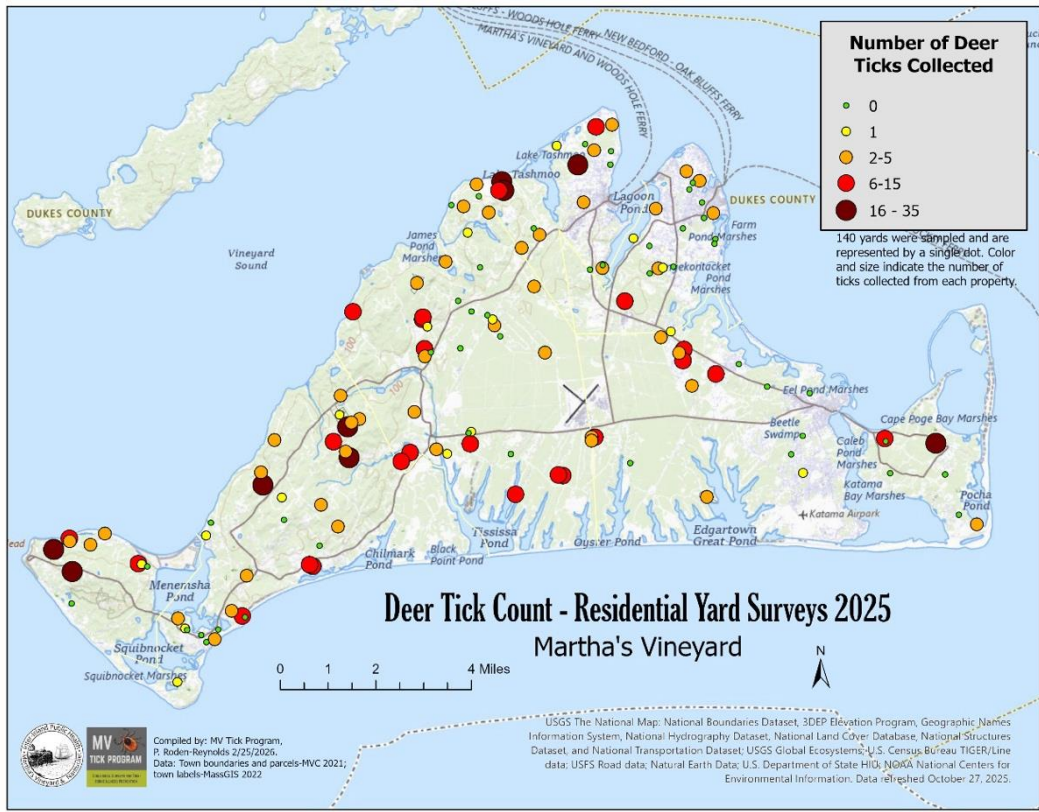
Town	Deer Donated	% of Harvest
W. Tisbury	55	16%
Aquinnah	8	16%
Chilmark	25	10%
Edgartown	14	6%
Tisbury	0	0%
Island Total	102	11%

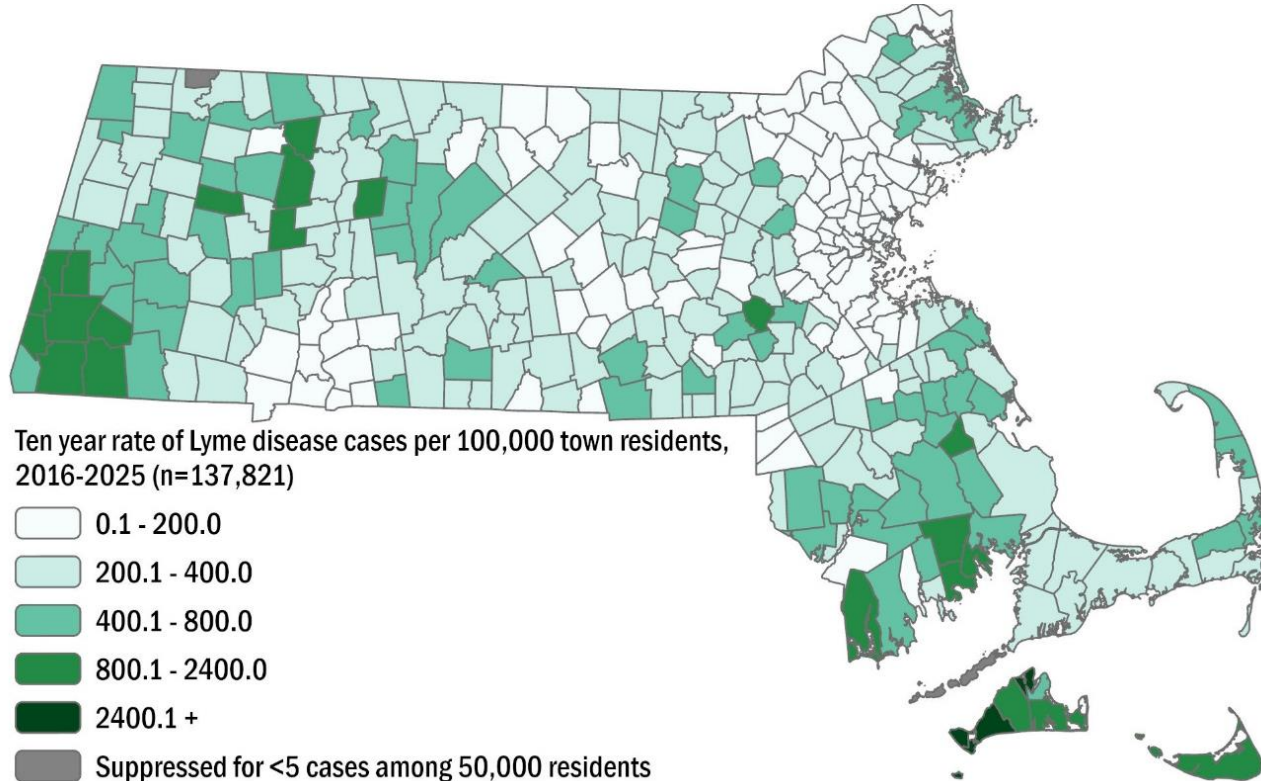


Yard survey results

Town	Number of Yard Surveys 2025	% of Surveys with at least one lone star tick (nymph/adult)
Aquinnah	10	70%
Chilmark	34	78%
Edgartown	26 (7 on Chappy)	71% (71% on Chappy)
Oak Bluffs	20	58%
Tisbury	21	52%
West Tisbury	36	68%



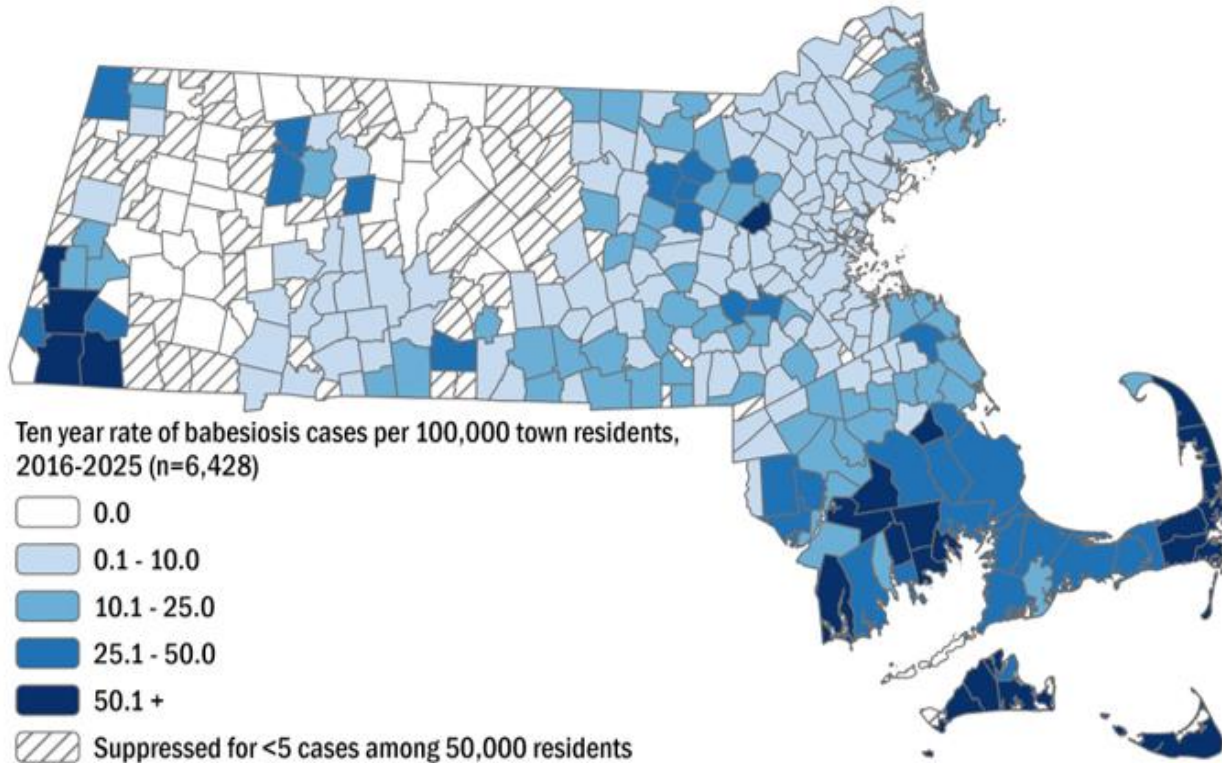




There were 2,815 cases with no town assigned that are not represented on this map but are included in the total N. Data are current as of February 4, 2026 and are subject to change.

Massachusetts Department of Public Health
Bureau of Infectious Disease and Laboratory Sciences

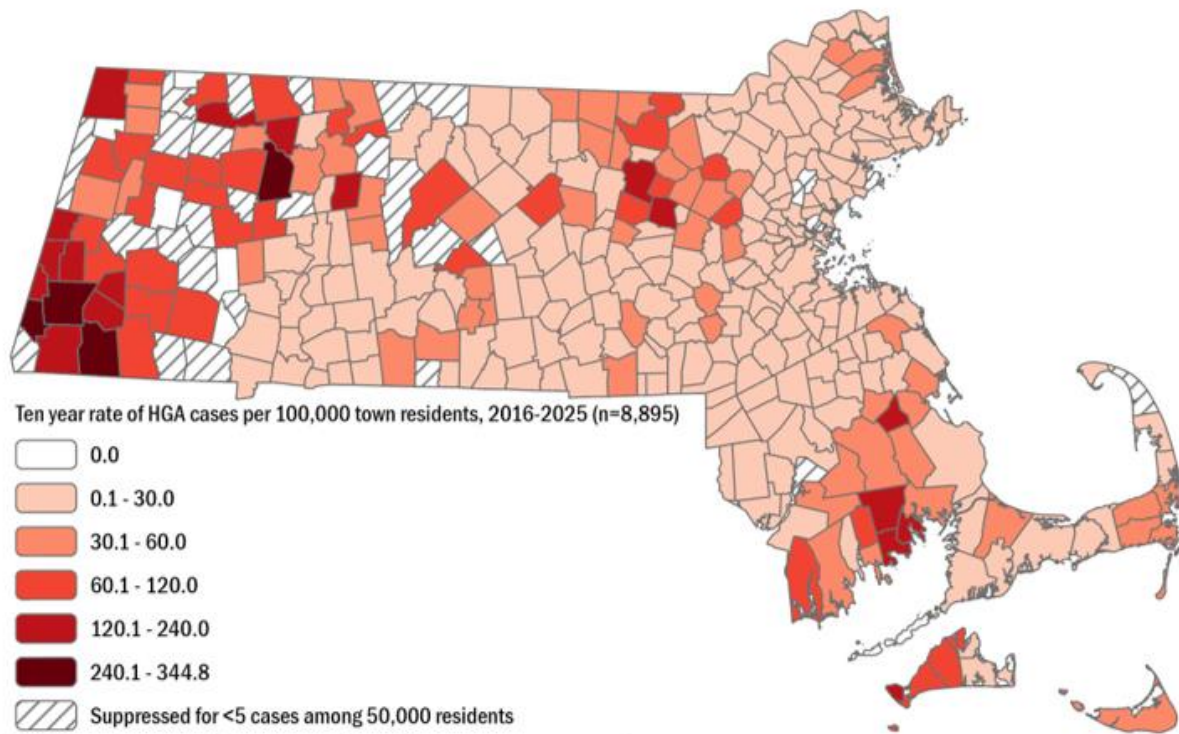




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There were 5 cases with no town assigned that are not represented on this map but are included in the total N. Data are current as of February 4, 2026 and are subject to change.

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