

# **Hendersonville, TN 2025 Estimated White-tailed Deer Population**

**A report to City of Hendersonville Board of Mayor and Aldermen**

**by**

**USDA Wildlife Services**





## Survey Results

WS completed this survey using a helicopter equipped with a FLIR camera, flying the area over the course of approximately two hours to minimize the possibility of recounting individual deer. It is important to note that even though the FLIR camera significantly increases the ability to detect deer in the area, the ability to detect individuals can be hindered by canopy cover and thick vegetation, angle of camera, and large objects obstructing view. Due to these factors the following results serve as only an estimation of the deer population.

Using the collected geospatial points, WS was able to create density estimation maps for each flight zone identified. Figure 2 is a full city density estimation which will then be broken down to depict estimated density in each zone. Each of the zone maps were calculated independently and are not comparable to each other. Areas where high deer density was observed are represented in red while lower density was observed is represented in green.

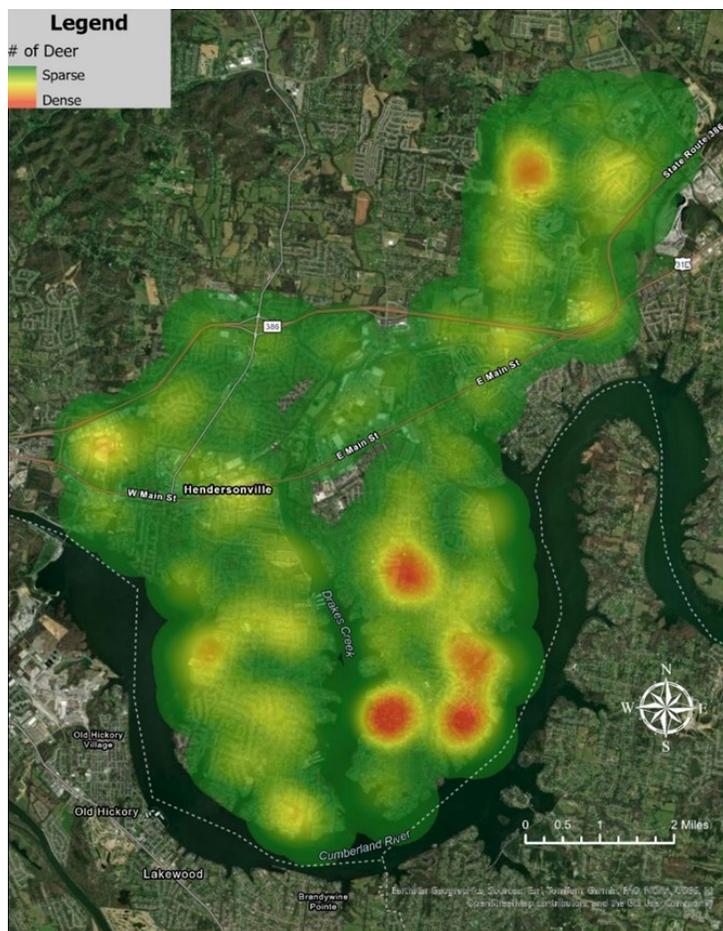


Figure 2. City of Hendersonville deer density map April 2025.

A total of 634 deer were observed during this aerial survey equating to approximately 16.7 deer/mi<sup>2</sup> across the entire City of Hendersonville. Tennessee Wildlife Resources Agency (TWRA) estimates the white-tailed deer population to be 19.6 deer/mi<sup>2</sup> in Tennessee as of 2023. Based on TWRA deer harvest report data, Sumner County is among the top 5 counties in the state for deer population.



## Indian Lake Peninsula

Indian Lake peninsula is approximately 6.67mi<sup>2</sup> making it the largest area surveyed. WS observed a total of 242 deer on this peninsula. Given the approximate area and number of deer observed, it is estimated that there are approximately 36.3 deer/mi<sup>2</sup>. Areas identified as having the most deer observed on this peninsula are west of Meadowlake Drive and north of Bayview Drive, east of Cobbler Circle, between Choctaw Drive and Bayshore Drive, and the area around Scarsdale Drive (Figure 4).

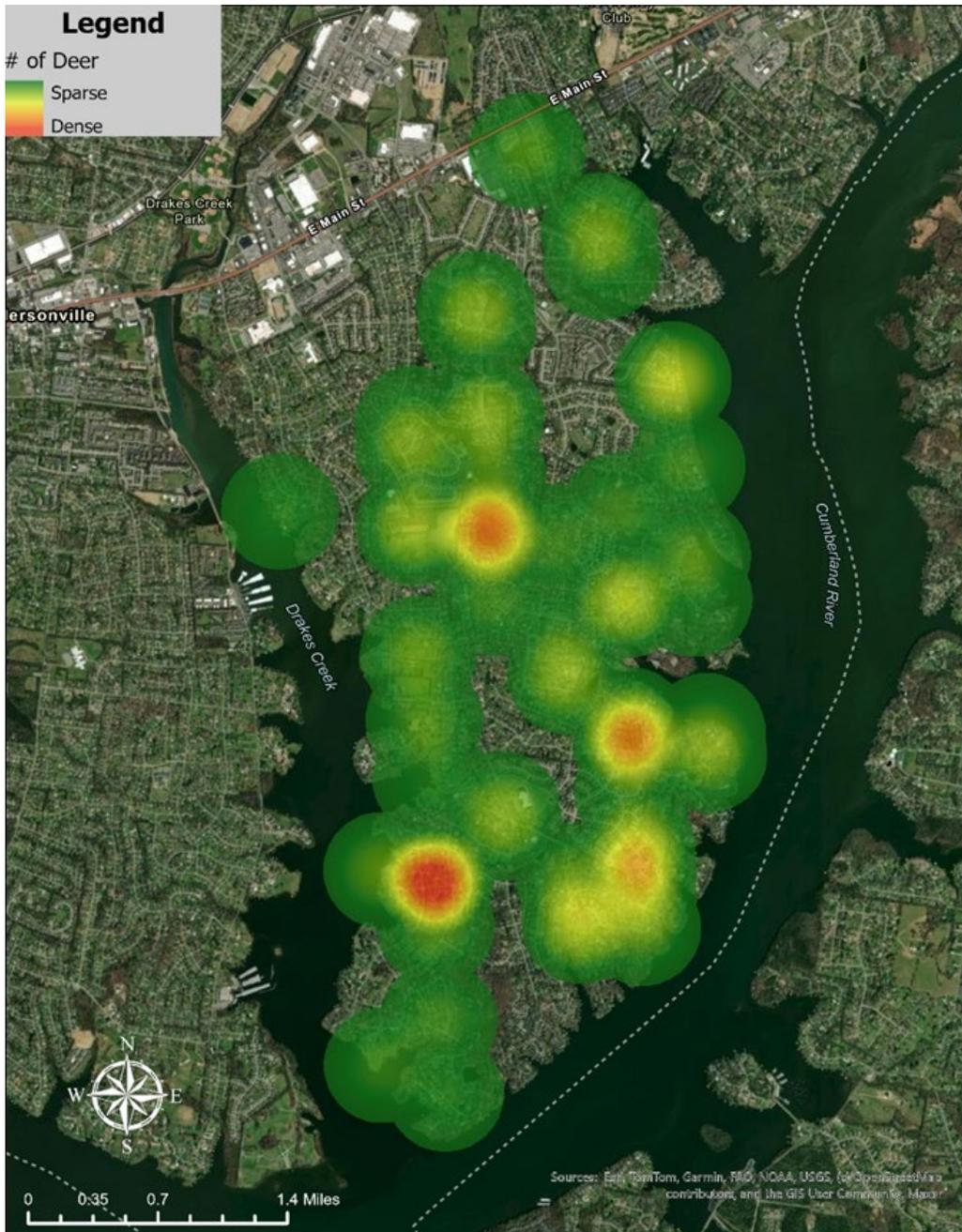


Figure 4. Indian Lake peninsula deer density map April 2025.

## South of Highway 386

A total of 119 deer were observed between Highway 386 and Highway 31. This area covers approximately 6.17mi<sup>2</sup> and has an estimated 19.3 deer/mi<sup>2</sup>. Areas identified as having the highest observed density in this flight area are around MGM Industries and near Hendersonville Animal Hospital (Figure 5).

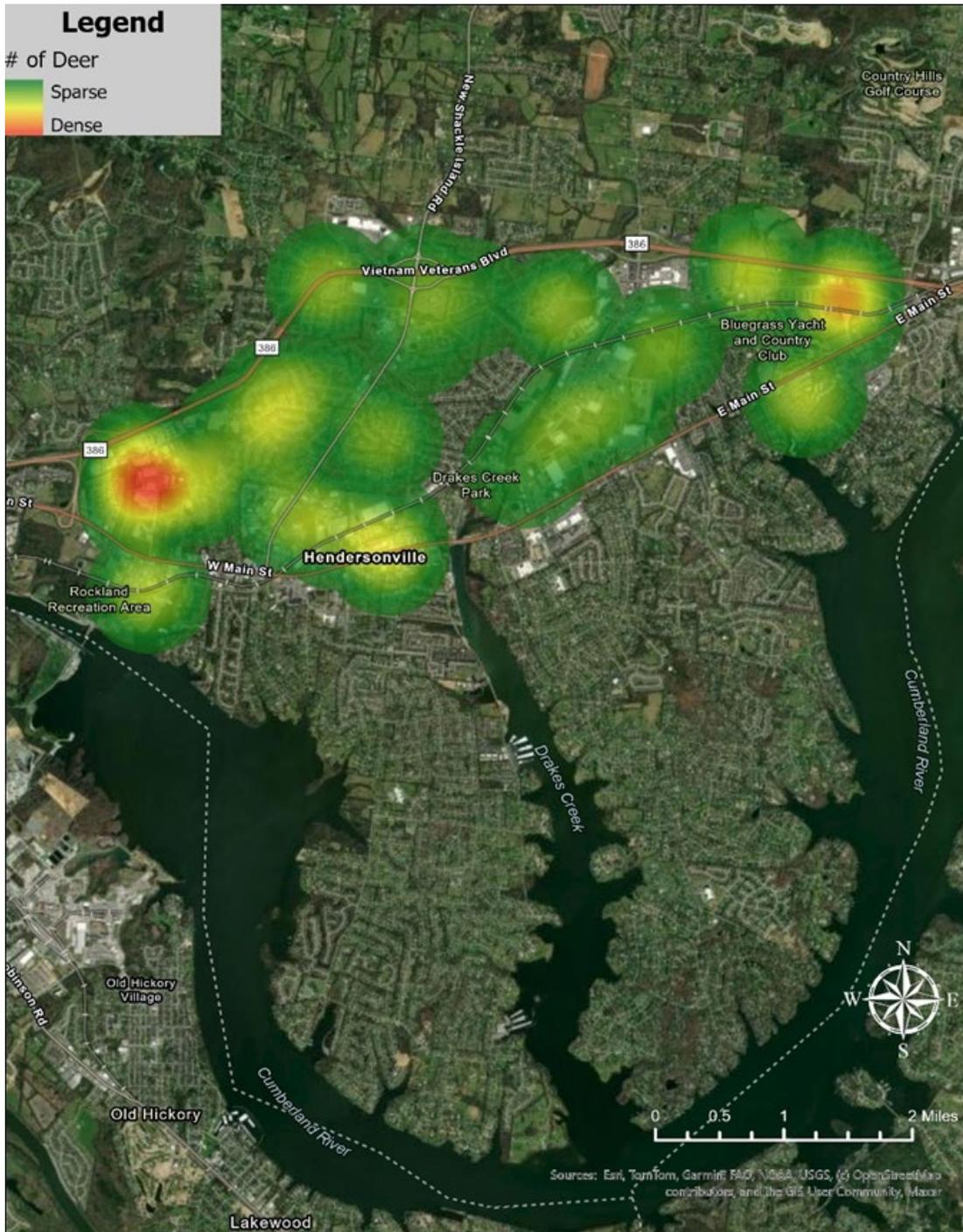


Figure 5. South of Highway 386 deer density map April 2025.

## Country Hills Golf Club

The fourth surveyed area consisted of the area around the Country Hills Golf Course to Highway 386 which is approximately 2.46mi<sup>2</sup>. Within this area, 122 deer were observed resulting in an estimated deer density of 49.6 deer/mi<sup>2</sup>. Areas where WS observed the most deer in this area are northwest of the Country Hills Golf Club, around Saundersville Station, and around the Rome Baptist Church (Figure 6).



Figure 6. Country Hills Golf Course deer density map April 2025.

While the entire City of Hendersonville's estimated deer population (16.7 deer/mi<sup>2</sup>) falls below the state estimate (19.6 deer/mi<sup>2</sup>), the individual sections of Saunders Ferry peninsula (27.5 deer/mi<sup>2</sup>), Indian Lake peninsula (36.3 deer/mi<sup>2</sup>), and the Country Hills Golf Course (49.6 deer/mi<sup>2</sup>) were well above the state average.

Another factor that should be taken into consideration is the difference in human population in the City of Hendersonville compared to the state and the human to deer ratio as a result. According to the 2023 census conducted by the U.S. Census Bureau, the City of Hendersonville had a total of 63,618 residents equaling approximately 1,674 people/mi<sup>2</sup>. This density is significantly higher than the state which had a population of 7,126,489 and approximately 173 people/mi<sup>2</sup> according to the 2023 census. This is equal to a human to deer ratio of approximately 100:1 in the City of Hendersonville versus an approximate ratio of 9:1 in the entire state.

## **Recommendations**

USDA WS recommends the following actions to help manage the deer population and help reduce human/deer conflicts:

- Continue a city-wide ban on feeding wildlife with a focus on deer. Enforcement of this ban is crucial to its effectiveness.
- Education programs and materials on the negative impacts feeding deer can have on deer herd health, ecosystem health, and risks to human health and safety.
- An annual non-lethal deer damage management workshop to educate the public on what they can do to help manage their own deer conflicts and thus help the city's issue.
- Continued surveys of the city to increase the amount of data available making it easier to identify problem areas and population trends.
- Coordinating lethal removal operations with professionally trained personnel over the course of three years with year one being focused on public outreach and acquiring landowner permission, year two being a targeted 30% lethal removal rate, and year three being a targeted 20% removal rate.