



FOLK LAND MANAGEMENT, INC.
WOODLAND & WILDLIFE CONSULTANTS

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September 14, 2023

Tim Gillette, Operations Director for Tega Cay
7725 Tega Cay Drive
Tega Cay, SC 29708

RE: Deer Spotlight Survey, 2023

Mr. Gillette,

Folk Land Management, Inc. conducted a deer spotlight survey on the Tega Cay peninsula on the nights of September 11 and 12, 2023. We followed the survey routes established by the SCDNR in 2022 which had a visibility area of 212 acres. This is approximately 14% of the total acreage of the Tega Cay peninsula which is 1,518 acres (Figure 1). The results of the surveys are presented in Tables 1 and 2.

We counted a total of 117 deer on the night of the 11th and 157 deer on the 12th. Based on the highest count total of 157 deer, the calculated deer density for the peninsular portion of Tega Cay is 1.3 acres per deer which calculates to a deer population of 1,028 deer. The deer density estimate of 1.3 acres/deer is considered extremely high, and this estimate is even higher if you consider the amount of land occupied by roads, sidewalks, and homes that provides no habitat for deer. At this population level there is likely browsing damage to ornamental landscaping as well as damage to native habitat on the property, and we observed this damage throughout the survey area. Also, at this deer density there are increased chances of deer vehicle collisions. Further, the data suggests there is a high doe to buck ratio and this suggests the deer herd will likely continue to increase because 1 buck can mate with multiple does.

Making management decisions for deer herds in urban communities requires integrating biological data with sociological factors to arrive at good management decisions. But, when just the biological data is considered, a reduction in deer abundance is recommended. If this herd continues to increase, the health of individual deer will be negatively impacted due to malnourishment and disease outbreaks.

Based on our experiences working with numerous urban communities who manage their deer abundance to minimize negative impacts by deer, a good target deer density falls between 25 – 40 acres per deer. At this density deer can still be seen and enjoyed by residents but negative impacts are reduced. To achieve this density a considerable number of deer will need to be removed.

The most common method used to reduce herd abundance is sharp-shooting by a skilled, very qualified professional. For the first year of the removal program the goal should be to remove about 30% - 35% of the estimated herd abundance or 308 – 360 deer. This level of herd reduction may need to be repeated for 1-2 additional years. Annual survey counts should be continued to provide feedback on the success of the previous year's removal effort and to make knowledgeable decisions on culling rates for the next year. These high removal rates are needed to offset reproduction and cause a net decline in overall herd abundance. Once the herd is reduced to desired levels, the annual removal rate

could drop to 15%-20% of the estimated population to sustain the population at the new, reduced numbers. In Figure 2, I show actual numbers and population trends for an urban community that has been in a deer management program for over 2 decades. It demonstrates population management can be accomplished and sustained, but the key is removing sufficient numbers of deer initially to achieve herd reduction.

If deer culling is approved by the City, then we need to make an application to the SCDNR for the necessary permits and tags. I can submit that request once the number of tags desired for the first year is decided. One note for your consideration is that any tag request greater than 75 would have to receive approval by the SCDNR Board. Also, the timeframe set by the DNR for the culling operations is September 15 through March 1.

Please feel free to contact me to discuss this report and discuss management options for the deer herd. Even if no management action is planned at this time, I highly recommend continuing the annual survey so a long-term data set is developed which will allow the community to make informed decisions regarding deer management in Tega Cay.

Thank you for the opportunity to work with you.

Regards,

Ernie P. Wiggers

Ernie Wiggers, PhD
Certified Wildlife Biologist

cc: Charles Ruth, SCDNR
David Henderson

SURVEY DATA

Table 1. Number of Deer Observed by Sex and Age class during spotlight survey counts on Tega Cay. Survey area = 212 acres; total land area = 1,600 acres.

DATE	BUCKS	DOES	FAWNS	UN-IDENTIFIED	TOTAL	ACRES/DEER	Estimated herd size
SC DNR 3/21/22	0	0	0	101	101	2.1	762
SCDNR 9/14/22	NA	NA	NA	NA	117	1.8	889
9/11/23	19	69	20	10	117	1.8	889
9/12/23	19	96	42	0	157	1.3	1,230

Table 2. Population Parameters for deer herd observed during spotlight survey counts on Tega Cay.

YEAR	AVERAGE DOES/BUCK	AVERAGE FAWNS/DOE	HERD INCREMENT	AVERAGE % UNIDENTIFIED
SCDNR 3/21/22	NA	NA	NA	NA
SCDNR 9/14/22	2.5	0.70	NA	NA
2023	4.3	0.4	0.31	4%

Figure 1. Outline of the Tega Cay deer survey area and survey transects followed for counting deer.

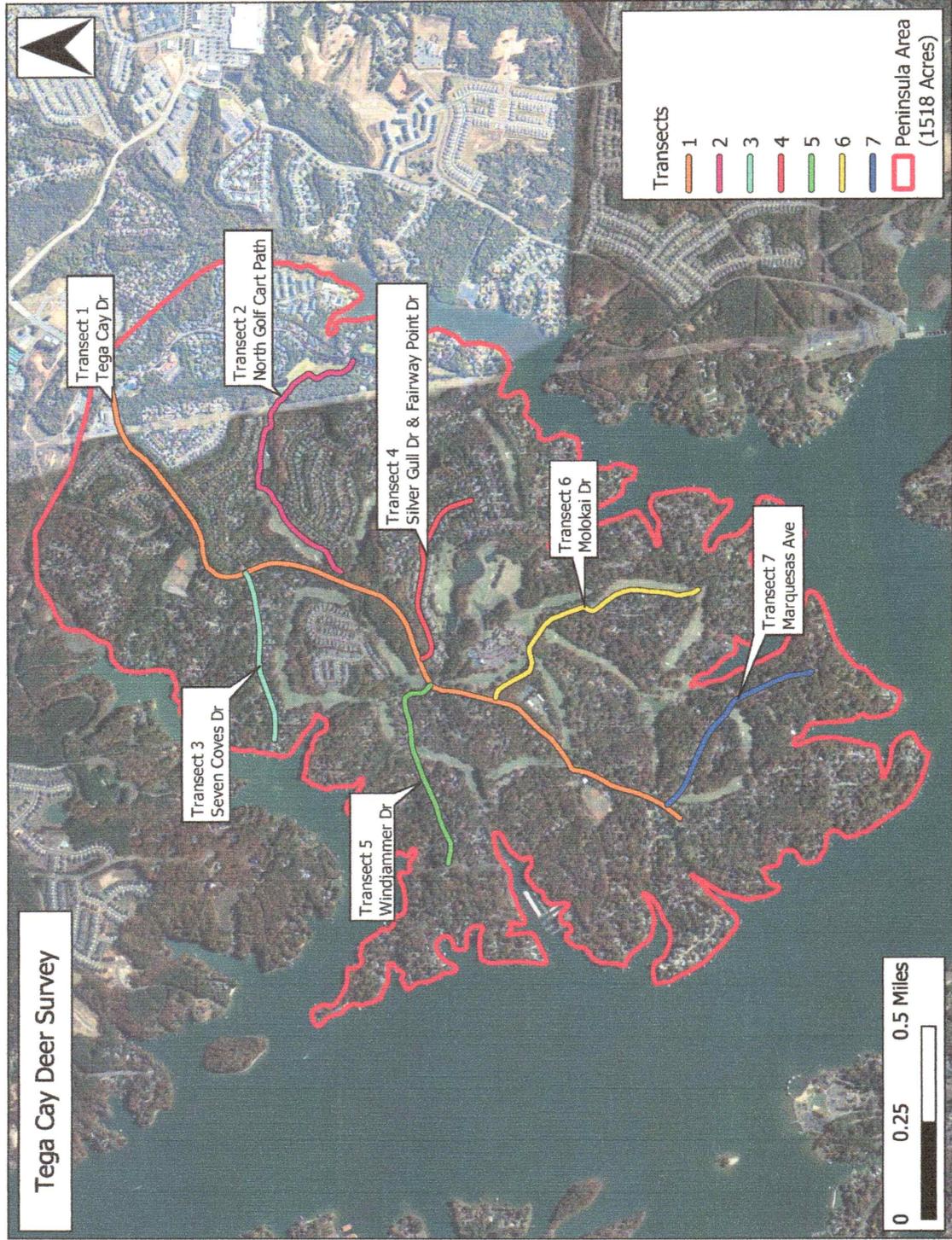


Figure 2. Graphing actual data from an urban deer management program showing the initial high harvest rate needed to reduce deer abundance and then the lower harvest rates used to sustain deer herd abundance in an urban community using sharpshooting as a management tool.

