



## 2020-21 Harvest Recommendation Report

Southwest Hamilton Wildlife Management Association  
Hamilton and Lampasas Counties

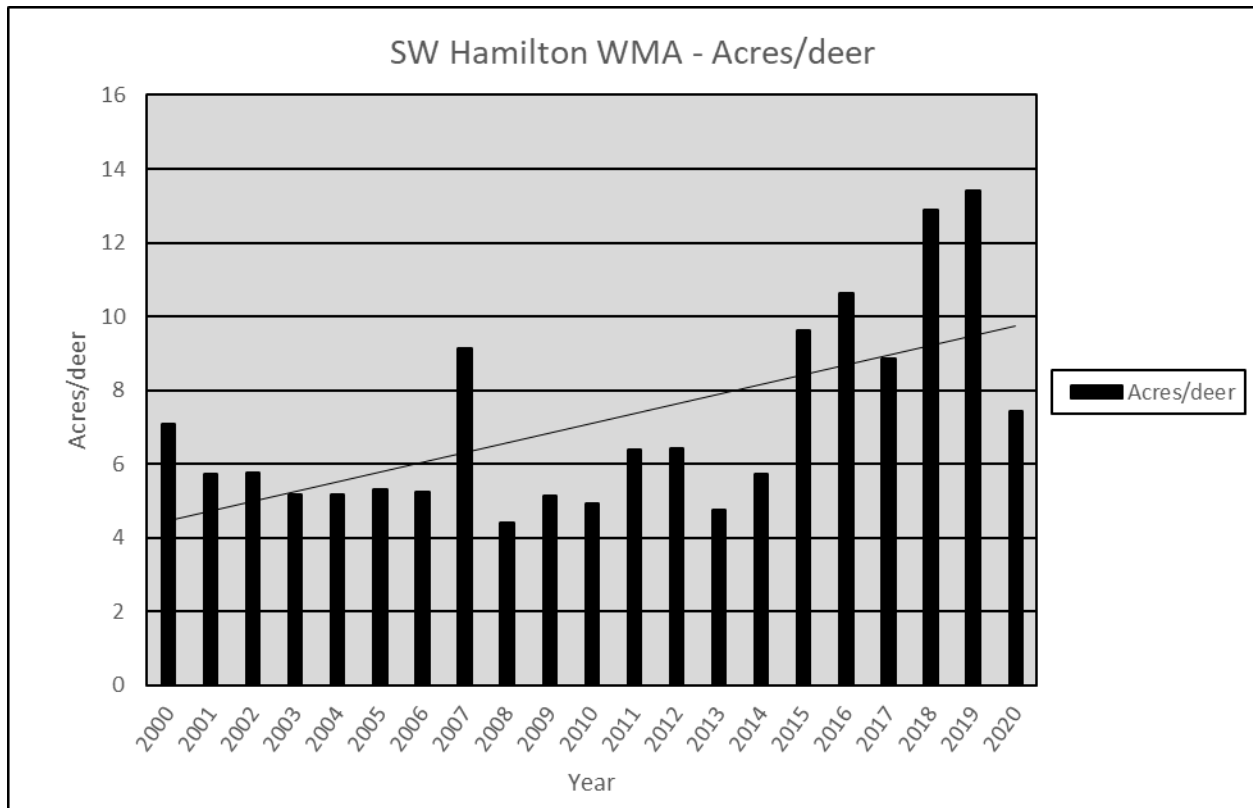
Southwest Hamilton WMA strives to maintain deer numbers below the carrying capacity of the habitat and provide ample mature buck harvest opportunities for its members. This report provides the supporting information used to formulate the 2020-21 deer harvest recommendations.

### Deer Population Estimate

Population estimates are based on survey data, both incidental daytime and spotlight data, collected by SW Hamilton WMA members. Data collected from spotlight routes (East and Northwest Routes) were used to estimate deer density and herd composition (attached). Surveys for each route were replicated at least 3 times. Incidental data (2,003 identified deer from 16 member properties) were collected to assess buck antler quality and strengthen herd composition estimates.

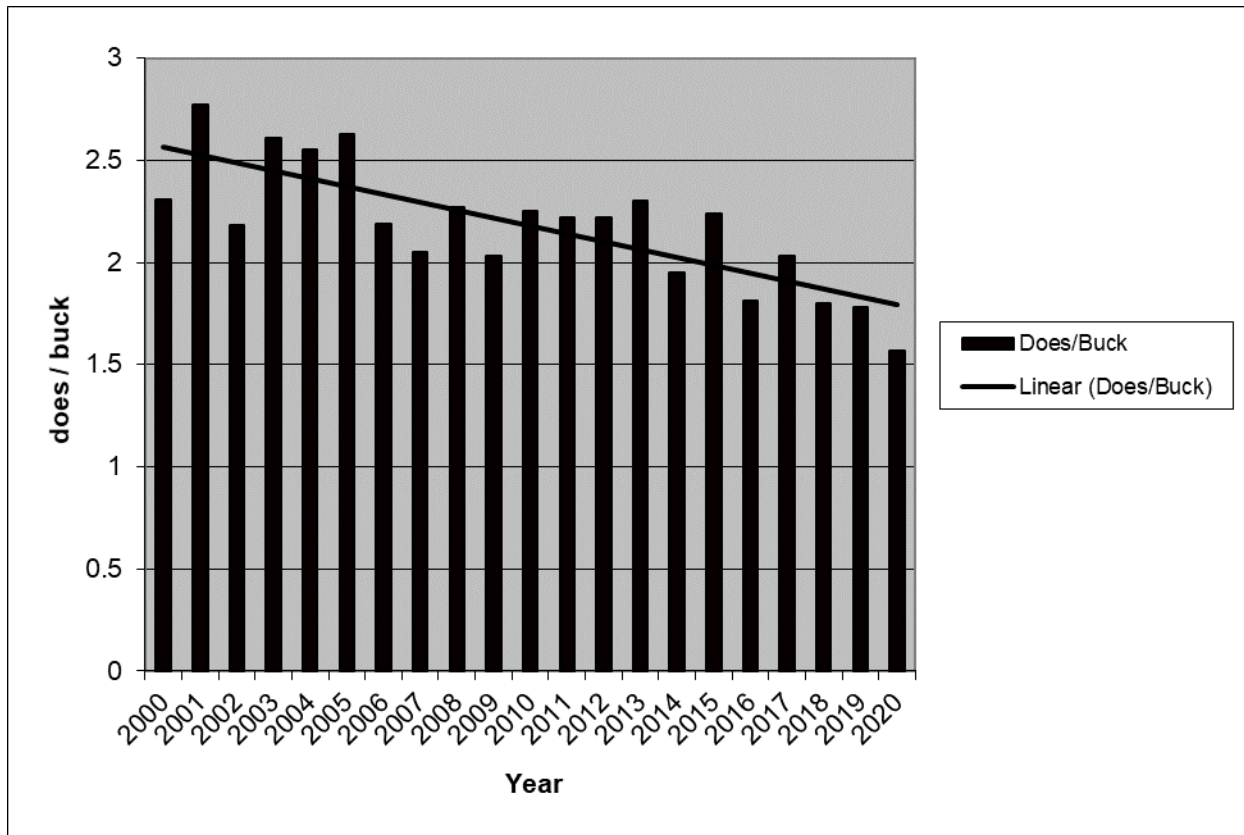
Population density – The current estimated deer population density is 7.42 acres per deer, which is a welcome increase compared to last year’s deer density estimate of 13.41 acres/deer. The estimated adult deer density (10.06 acres/adult) is right in line with the post-harvest deer density objective of 8-10 acres/deer (Figure 1). This increase in population size is hard to explain due to the sudden nature and much higher than the last 5 years.

Figure 1. Acres/ deer trend.



Sex ratio - The typical management objective for a free-ranging deer population is to maintain the adult sex ratio at 2 does per 1 buck. The sex ratio (currently 1.57 does per buck) exhibits a declining trend (a good thing!), towards fewer does per buck since the association’s inception (Figure 2). This should allow for more bucks seen during hunting season and selective harvest.

Figure 2. Sex ratio trend, Southwest Hamilton WMA, 2000-2020.



Recruitment - The current estimated fawn production of **0.55 fawns per doe** is higher compared to last year’s estimated recruitment (0.43 fawns per doe) and higher than the long-term average fawn production (0.43 fawns per doe). Increased fawn crop is great for the future deer population within the WMA.

Buck antler quality – 472 bucks observed during the daylight observation surveys were classified by number of antler points to provide the following summary: 6% are spikes, 20% have 3-5 points, 20% have 6-7 points, and 54% have 8+ points. This has been fairly standard the last few survey seasons and should lend itself to the harvest of older age class bucks.

## Deer Harvest Recommendations

Southwest Hamilton WMA strives to achieve a post-harvest deer density objective of 8-10 acres per deer, which is thought to be below the carrying capacity of area's habitat. Additionally, the WMA strives to maintain a sex ratio of 2 or fewer does per buck. A quality management philosophy has been adhered to by limiting buck harvest to no more than 33% of the estimated number of bucks and avoiding the harvest of young bucks with good antler characteristics.

Population estimates provided from deer spotlight/incidental data and deer population projection data were used to develop an "average" deer harvest recommendation.

### Bucks

A 23% buck harvest rate results in a recommended harvest of no more than **9 total antlered bucks per 1,000 acres (1 buck per 111 acres)**. Last year's harvest recommendation was 1 buck per 166 acres. The actual buck harvest rate last year was very low and should allow for buck sightings to increase.

The harvest recommendation includes all bucks, including trophies or management bucks. According to the buck harvest strategy for the association the following bucks are eligible for harvest:

- 4.5 + year-old bucks – Peak antler development is ~ 6.5 so I would suggest the bucks with the best antler traits be allowed to reach full potential in the 5.5+ age class.
- 3.5 year-old bucks with less than 8 antler points – Be certain not to harvest bucks that could be younger than 3.5. A lot of bucks are taken as management in this class that are actually top end 1.5 or 2.5 year olds.
- Bucks with at least one unbranched antler – Focus on true spikes and take the smallest first (i.e. Harvest a 3" spike over a 10" tall 3 point).

The actual number of bucks harvested will be limited by the numbers of bucks that meet the harvest criteria above. In other words, the actual buck harvest rate should be less than recommended if individual properties observe fewer deer that meet these criteria.

### Does

The recommended doe harvest is **1 doe per 71 acres** throughout the area, which is approximately 23% of the number of does estimated to be in the population. The harvest rate strives to lower the sex ratio, make room for an incoming fawn crop and maintain the post-harvest deer density. As a general rule-of-thumb, approximately **1.5 does should be harvested for every antlered buck harvested**.

## Harvest Data

Please find the attached new deer harvest log for use this deer season. Please use this form and discard any previous harvest log versions that you may have on file. The new log was created for the WMA to satisfy the requirements for MLDP harvest log and/or cold storage record book.

**In order to standardize data collection, I'm asking all association members to use this form for recording deer harvest data.**

There are several changes I want to bring to your attention:

- Weight data (live or field-dressed weights) are no longer required, but I would encourage everyone to collect this information so I can summarize at the end of the season.
- Full antler measurements are no longer required. **Only the inside spread and number of points needs to be recorded.**

Please record the following information for each harvested animal:

- Date of kill
- Species
- Sex
- Age (Refer to aging material attached – do your best and try to learn jawbone aging).
- Weight (Please don't guess! If an accurate weight cannot be recorded just leave blank).
- Inside spread
- Number of points R/L

If you are using this form to meet the harvest data requirements of MLDP, cold storage log, please be aware that there are additional data/information requirements. You can find these listed in the note at the bottom of the form.

### **Harvest reporting**

Please find the attached harvest summary form to be completed and brought to the spring meeting along with your completed harvest data sheet. MLDP properties will need to do an additional step in reporting harvest and management practices in the LMA system before April 1, 2021.

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