

# Grapevine Lake 2020-2021 Deer Season



United States Corps of Engineers Grapevine Lake

## **Purpose**

Deer Permits for United States Army Corps of Engineers (USACE) Wildlife Management Area (WMA) on the west side of Grapevine Lake are issued through a fair application process to which each hunter has an equal chance to be drawn. The requirement to have a permit helps protect the wildlife resource from being over harvested and preserves it for future generations to come.

Hunter surveys are issued to all permit holders to get a better understanding of how the hunting season went as far as hunter satisfaction and harvest numbers. These surveys help shape the future of the Grapevine Lake hunting seasons.

## **COVID Application Process**

In years past the deer permit application process, as well as the issuing of other hunting permits, at Grapevine Lake has been in person. Because of the COVID pandemic the decision was made to change the application process to run through the email of the Hunting Coordinator.

## **Deer Permit Background**

In the 2020-2021 season, 251 hunters were issued permits to deer hunt in the WMA managed by the USACE on Grapevine Lake. At the end of deer season all the deer hunting permit holders are required to fill out and return a survey that helps guide the decisions we make for future hunting seasons. If a permit holder fails to return a survey at the end of the season, they become ineligible to be drawn for the following season. This past season, there were 761 total applicants. 79 of these hunters were disqualified due to offenses such as submitting multiple applications or failure to submit a survey if drawn in the past season. This left a total of 682 eligible hunters, which made the probability to get drawn about 37% this past year.

The survey was 11 questions long and included a variety of questions ranging from about the number of times going hunting to asking if the hunters had any suggestions for future hunting seasons.

## **Survey Data Results**

Of the 251 permit holders, 119 returned surveys. 15% of these permit holders did not hunt, which left us with 101 surveys from people who hunted. The success rate of these hunters was 12%. The rough estimate of doe to buck ratio based on these hunters' responses was 1.9 does per buck. There was a total of 14 deer killed, 7 bucks and 7 does, by 12 different hunters.

### **Question 1: How many times did you go hunting this season?**

Question 1 includes responses from every permit holder who submitted a survey (119). This question showed even distributed responses across the board for the most part. The answer that was recorded the most was 10+ times with 42 responses. The responses of 0 times and 9 times also stand out. The response of 0 times was recorded the second most of any response with a total of 18 responses. And 9 times was recorded the least with only 2 responses. (Figure 1)

### **Question 2: How many hours did you spend hunting on a typical day?**

Question 2 only includes responses from the permit holders who hunted at least one day (101 hunters). This question shows us that hunters generally always hunt three or more hours. The responses from

three hours and going longer than that includes every response except one. It can also be assumed that most hunters who chose the 6+ hours response hunted all day. 4 hours was the response chose most by hunters with 37 responses being recorded. (Figure 2)

### Question 3: Which days of the week did you hunt the most?

Question 3 included answers from the 98 hunters. It was answered by the hunters circling one of the seven days of the week. Because the hunters would occasionally circle more than one option, a couple new options were added. They include a 'Combination of Weekdays,' a 'Combination of Weekend days,' and a 'Combination of Weekend and Weekdays.' This question showed us that Saturday was by far the day that was hunted the most. Saturday had 27 hunters that only chose Saturday as the day which they hunted the most. Most of the hunters that were put in the response columns of a 'Combination of Weekend days,' and a 'Combination of Weekend and Weekdays,' also had Saturday circled. Overall, we can see that the days on the weekends were hunted much more than any other day of the week. (Figure 3)

### Question 4: What time of day did you go hunting the most?

Question 4 was set up very similarly to question 3, except the added column options were 'All times of the day,' and 'Mornings and afternoons.' Sunrise-10am was the option chosen the most by hunters being chosen solely by 42% of hunters (42), with another 25% (25) choosing it in conjunction with another option. The two middle of the day options for this question were rarely chosen by hunters, (4% of the time when combined.) (Figure 4)

### Question 5: How many other hunters do you typically see while hunting?

Roughly 82% of hunters recorded seeing two or less other hunters while hunting. One person recorded typically seeing 10+ other hunters while hunting. The most common response was 1 other hunter, 36 hunters chose this response. 6, 8, and 9 other hunters were not chosen. The second most common response chose by hunters was 0 other hunters seen, this response was recorded 25 times. (Figure 5)

### Question 6: How many deer did you harvest this season?

Roughly 12% of the hunters found success in the 2020-2021 Grapevine Lake deer season. 10 hunters killed one deer and 2 hunters killed two deer. 89 hunters (88%) did not harvest a deer. This information also tells us that 14 deer were killed throughout the season, by 12 different hunters. (Figure 6)

### Question 7: If you killed deer what was/were the sex(es)?

Question 7 only contains answers from the hunters who found success during the season (12 hunters). There were 14 deer harvested during the season. 7 of these deer were bucks and 7 were does.

### Question 8: How many bucks did you see while hunting?

The most common response to question 8 was 0 bucks seen, with 26 hunters (26%) reporting this. 2 bucks seen was the second most common response with 21 hunters (21%) reporting this. 0-2 bucks seen make up for 60% of the hunters' responses. Another response that stands out is 7 hunters reported seeing 10+ bucks while hunting. (Figure 7)

Question 9: How many does did you see while hunting?

The most common response to question 9 was 10+ does seen, with 36 hunters (36%) reporting this. The second most common response was 0 does seen, with 16 hunters (16%) reporting this. 9 does seen had the least amount of responses with 1 response. (Figure 8)

Question 10: On a Please rate, on a scale of 1 to 5, your overall satisfaction with your hunting experience this season. 1 = horrible, 5 = spectacular.

The most common response to question 10 was 4, the second highest satisfaction the level, with 37 responses (37%). The Least common response was 1, the lowest satisfaction level. Hunters recorded this response 4 times (4%). The top two satisfaction levels accounted for 71% of the hunters whereas the Lowest two satisfaction levels accounted for 10% of the hunters. (Figure 9)

Question 11: How can the Corps of Engineers improve your overall hunting experience at Grapevine Lake?

Only 50 of the hunters left suggestions for us. With these suggestions being open-ended answers, they were categorized or summarized to fit them in a category so we could attempt to see if there were any trends of people thinking along the same lines as one another. Once this was done, it was clear there were 2 common answers that stood out more than the others and 1 in specific. The most common general response was the hunters suggesting to improve/add places to access the hunting areas more effectively. This general response had 54% of the suggestions (27). The second response that stood out was the general concept that we need to better enforce the rules that are set in place. This response accounted for 16% of the responses (8). (Figure 10)

**Key take-aways**

47% of permit holders returned surveys (119), which is much lower than we would like, but is an average return rate for what we generally receive. Of these permit holders the harvest success rate was 10%.

Saturdays and Sundays are by far the busiest days of the week in our wildlife management areas, so if you are looking to stay away from other hunters you would either need to try to get to a more remote area of our WMA or try to hunt during the week if possible. Based on question 5, There does not appear to be too many hunters in the WMA, as most hunters typically saw 3 or less other hunters while hunting (Figure 5). Especially with most of the hunters hunting the same days.

There were many deer seen by hunters through the deer season. Question 9 of the survey shows us a trend that many hunters either seen none to hardly any does, or they saw 10 or more (Figure 8). Question 8 showed the number of bucks seen by hunters and this showed more of a decreasing trend with the highest value being hunters seeing none to hardly any bucks and decreasing with the number of bucks seen (Figure 7). With the answers to these two questions, were able to get a rough estimate of the buck to doe Ratio which was roughly 1:2. This is an extremely rough estimate due to the different factors that play into the numbers we received. According to Texas Parks and Wildlife Department (TPWD), the ideal buck to doe ratio is around 1:1.

Question 9 shows us that over 71% of the hunters were satisfied with their experience, and another 19% that were neither satisfied nor dissatisfied. This tells us that there isn't very much that needs to be

changed at this time. Question 10 showed us that the most common suggestion to improve satisfaction is to add more and/or different access points or parking areas to the property. There are no current plans to add these areas due to a lack of resources, including funding and proper location, although there are possible opportunities for this in the future.

### **Upcoming Season**

As of now the upcoming season is planned to be ran very similar to this pervious season with some slight changes. We plan to run the application process in July for a period of 1 month, the drawing will take place and late August and all applicants will be required to pick their permit up at the Grapevine Lake Project Office.

There are hopes to perform a population survey on the deer prior to the 2021-2022 hunting season however this has not been set up or planned at this time yet. This population survey could affect the permit distribution process but is not likely to.

Lastly, not everyone who gets a permit is able to hunt, but the returned survey is still valuable information to us. Remember, if a permit holder fails to submit a survey by the deadline, they will be ineligible for the future season at a minimum.

### **Data Charts and Graphs**



Figure 1: Data chart from Question 1 of the 2020-2021 deer hunter survey.



Figure 2: Data chart from Question 2 of the 2020-2021 deer hunter survey.

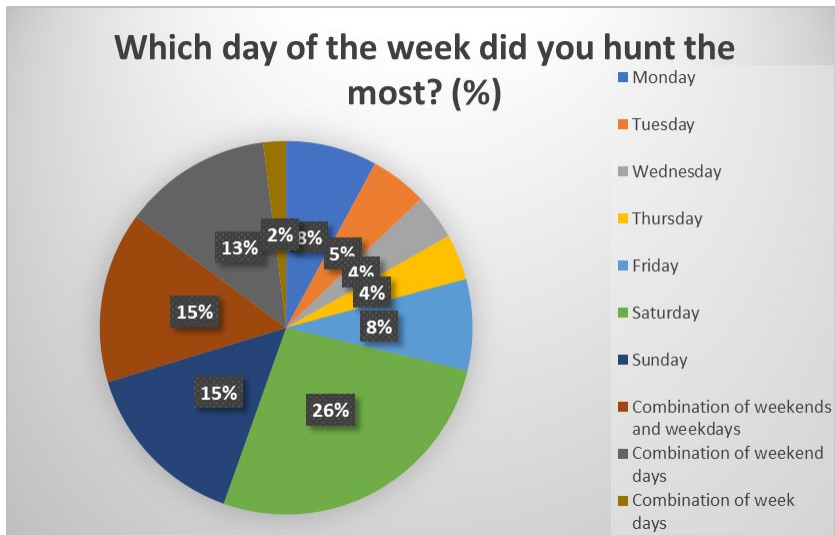


Figure 3: Pie chart from Question 3 of the 2020-2021 deer hunter survey.

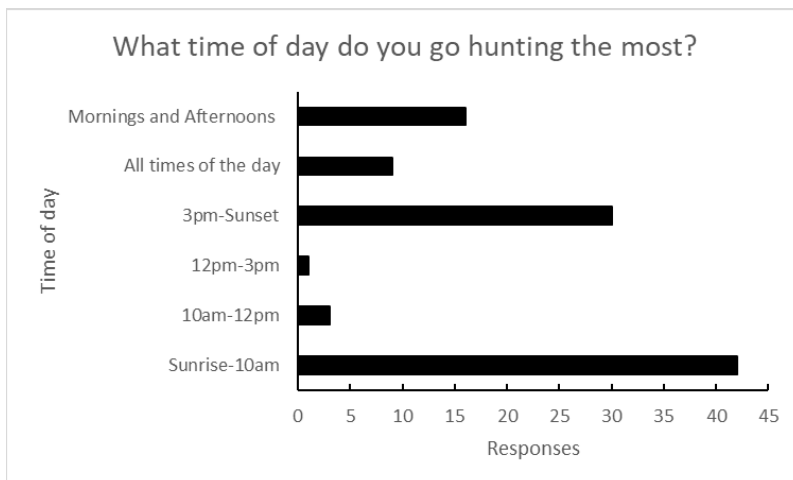


Figure 4: Data chart from Question 4 of the 2020-2021 deer hunter survey.

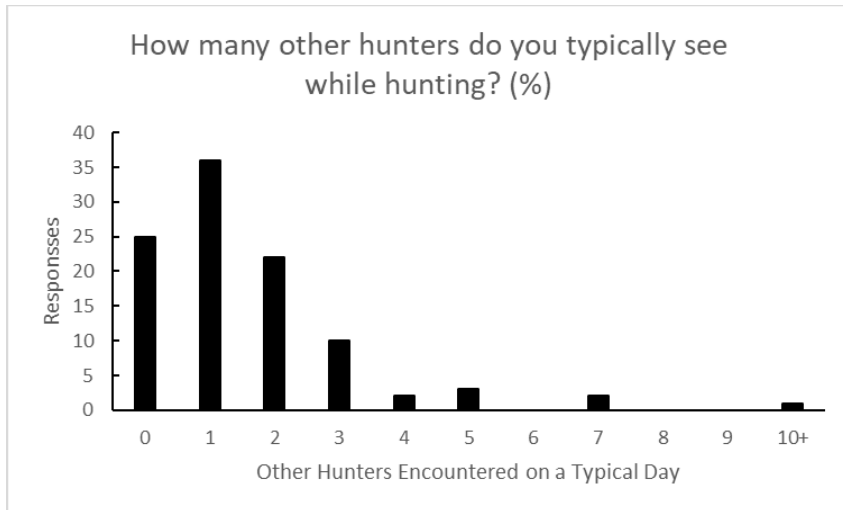


Figure 5: Data chart from Question 5 of the 2020-2021 deer hunter survey.

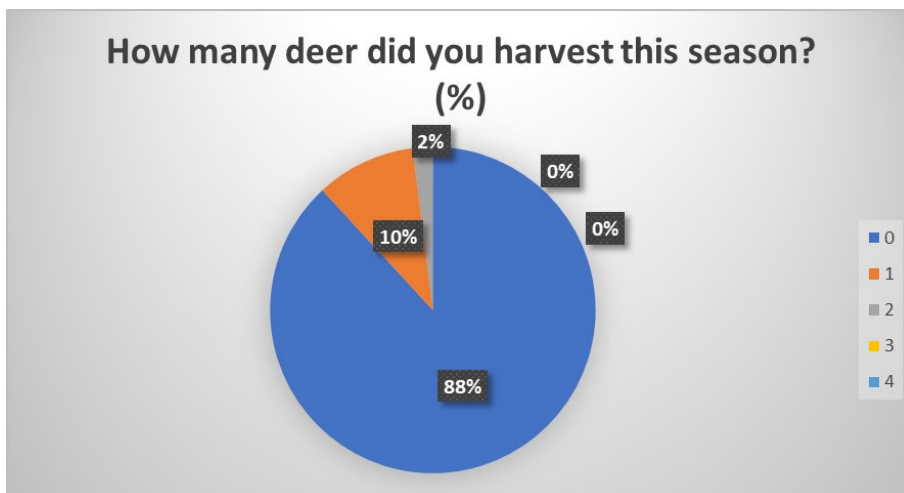


Figure 6: Pie chart from Question 6 of the 2020-2021 deer hunter survey.

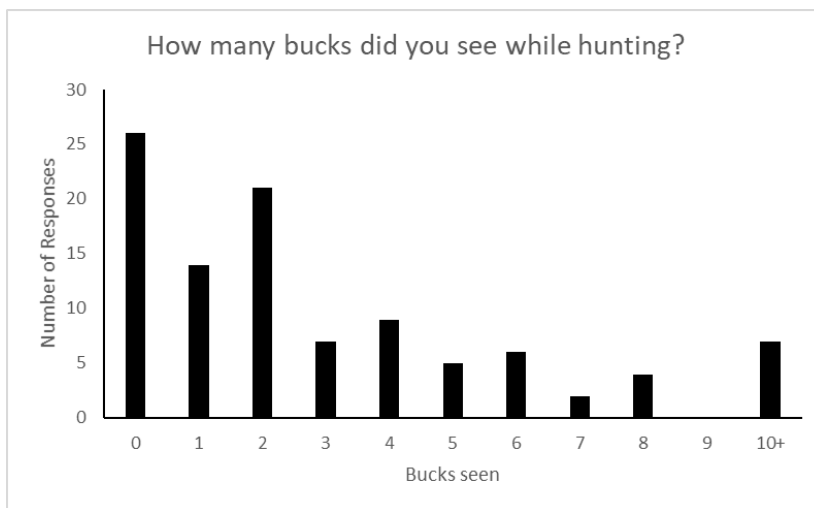


Figure 7: Data chart from Question 8 of the 2020-2021 deer hunter survey.

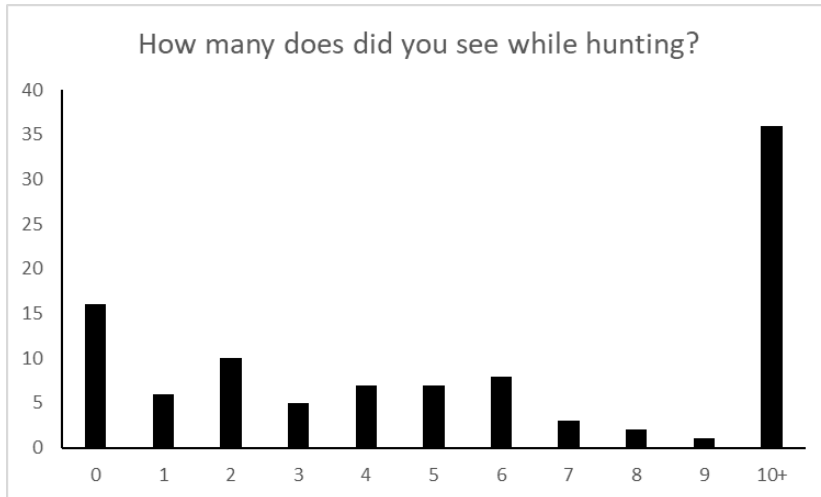


Figure 8: Data chart from Question 9 of the 2020-2021 deer hunter survey.

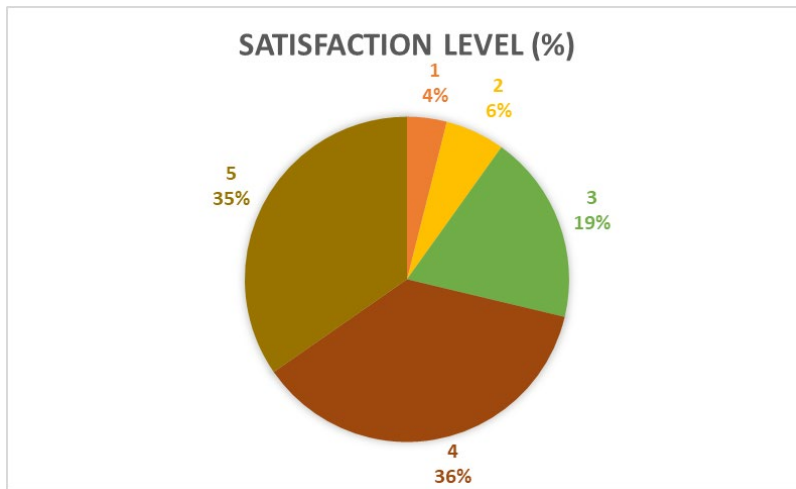


Figure 9: Pie chart from Question 6 of the 2020-2021 deer hunter survey. Satisfaction Levels with 1 being the lowest and 5 being the highest.

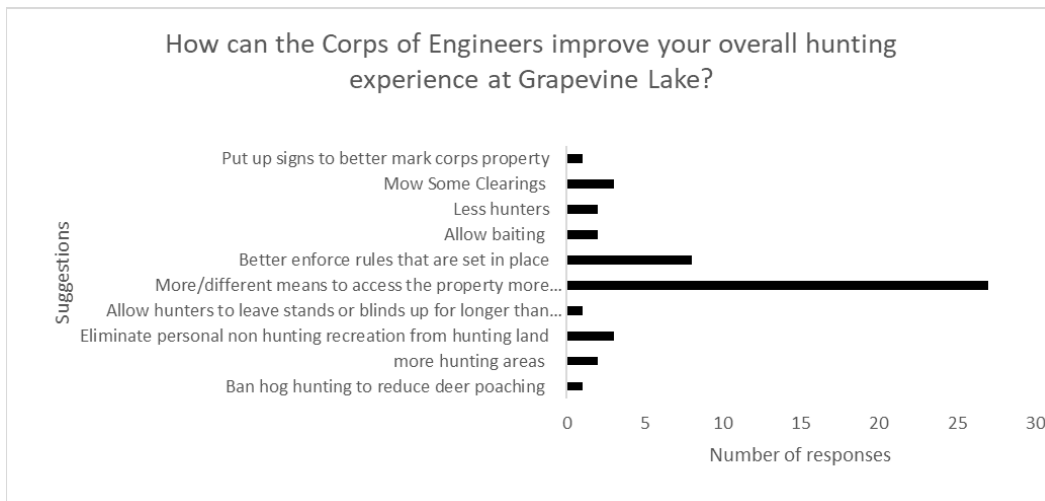


Figure 10: Data chart from Question 8 of the 2020-2021 deer hunter survey