### **NEBRASKA**



### HUNTER & ANGLER RESEARCH

2020 Survey of Nebraska Landowner Attitudes on Pronghorn Damage Abridged Report

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### **Executive Summary**

- A majority of respondents reported owning over 1,000 acres of land within an Antelope Management Unit (AMU; 85%).
- Most landowners reported that they frequently saw pronghorn on their property within the last 24 months (65%) with the exception of landowners in the Dismal and Eastern Sandhills AMU who most frequently reported only occasionally seeing pronghorn (14% and 38% respectively).
- Most landowners reported that there were too many pronghorn on their property (48%) and most frequently reported that pronghorn cause a light amount of damage (35%).
- The most frequent variety of pronghorn damage was to landowner fencing (74%), and the majority of landowners find the damage to be somewhat unacceptable (26%).
- The majority of landowners were unaware that the Nebraska Game and Parks Commission (NGPC) offers mitigation assistance (65%), depredation permissions (59%), and special pronghorn hunting permits to reduce pronghorn damage (70%).
- Few landowners have ever contacted NGPC for assistance with pronghorn damage (10%), and those that have most frequently contacted NGPC in 2019 (32%).
- Forty-two percent of landowners had pronghorn hunting occur on their property. Of those 23% personally hunted pronghorn and 66% reported between 1 and 5 total pronghorn hunters on their land in 2019.
- The majority of landowners would be in favor of allowing landowners to hunt throughout the entire unit, knowing this would likely increase the number of landowners applying for permits and decrease the odds of a landowner drawing a permit annually (49%).

#### **General Information**

This report describes responses to questions from the 2020 "Survey of Nebraska Landowner Attitudes on Pronghorn Damage." This survey was a tool to analyze Nebraska landower perspectives on the pronghorn herds residing on their land, the damage caused by pronghorn herds, how landowners might be encouraged to allow pronghorn hunting on their land, and how much pronghorn-hunting landowners are currently allowing on thier land. We provide information regarding the design and implementation of the survey as well as summarized responses to questions from the overall respondent pool and responses from individual Antelope Management Units.

#### **Nebraska Landowner-Pronghorn Project Objectives**

- 1. Gather information about Nebraska landowners who own property within Antelope Management Units
- 2. Assess landowner perceptions about pronghorn population size
- 3. Determine severity of damage caused by pronghorn to landowner property
- 4. Gauge landowner acceptance of property damage caused by pronghorn
- 5. Gain a better understanding about how landowners respond to prospective pronghorn hunters and evaluate landowner response to techniques aimed at encouraging landowners to allow more access to pronghorn hunters

#### **Mode Selection**

Biologists at the Nebraska Game and Parks Commission and the University of Nebraska held several meetings to design the survey instrument that would properly meet the objectives. A postal survey was used to determine the views of Nebraska landowners. Using this vehicle to collect information allows researchers to generalize results to a larger population. Surveys were mailed to a sample of landowners who owned property in at least one of the following Nebraska Pronghorn Management Units: Banner North, Banner South, Box Butte East, Box Butte West, Cherry, Cheyenne, Dismal, Eastern Sandhills, Garden, and North Sioux. Invitations were distributed on August 14, 2020. A reminder postcard was mailed to non-respondents on August 28, 2020. A final reminder packet with another copy of the survey was mailed on September 11, 2020. The survey period closed on September 25, 2020.

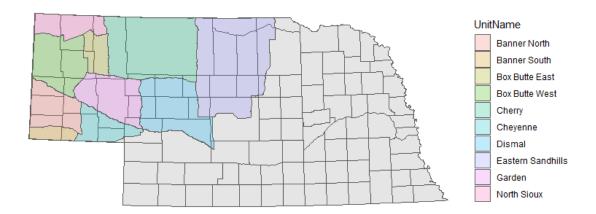


Figure 1. Antelope Management Units for the 2020 Pronghorn Landowner Survey.

#### **Design and Item Selection**

The design and fielding of the survey was accomplished by the Human Dimensions Lab in the University of Nebraska-Lincoln School of Natural Resources and the Nebraska Game and Parks Commission. The questionnaire consisted of items pertaining to the number of pronghorn on landowner property, how landowners feel about the number of pronghorn on their property, the amount of damage caused by pronghorn, landowner feelings about the amount of damage caused, how landowners respond to prospective pronghorn hunters, and how landowners feel about techniques designed to enourage landowners to allow more access to pronghorn hunters.

#### **Analyses**

This report depicts a general summary of how survey respondents resonded to each question. A depiction of how respondents answered each question by Antelope Management Unit follows each general summary.

### Survey population

Questionnaires were sent to 1,327 landowners. Landowner contacts were acquired by Nebraska Game and Parks Commission staff through county assessor records. The overall response was 499 landowners and the overall response rate to the survey project was 38%.

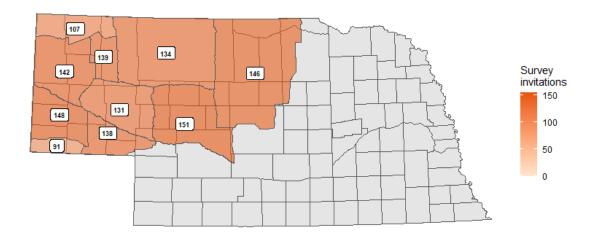


Figure 2. Number of invitations sent to landowners in each Antelope Management Unit for the 2020 Pronhorn Landowner Survey. Values depicted in AMUs represent number of invitations sent (N = 1,327)

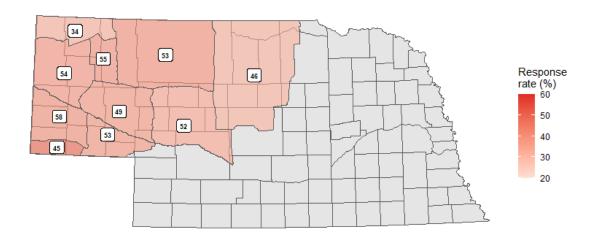


Figure 3. Response rates for each Antelope Management Unit for the 2020 Pronghorn Landowner Survey. Values depicteed in AMUs represent the number of responses from that AMU (%; N = 499)

#### **Survey Results**

#### **Property size and location**

Q1: In which Antelope Management Unit is the majority of your land located? If multiple units, please select the unit that is most relevant to your answers.

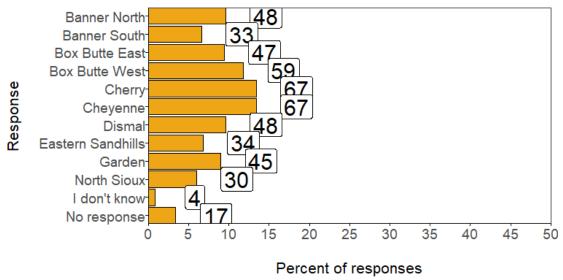


Figure 4. The Nebraska Antelope Management Unit in which respondents of the 2020 Landowner Pronghorn Survey hold the majority of their land. The x-axis indicates the percentage of all respondents and the number to the right of the horizontal gold bars represents the actual number of respondents (N = 499).

#### Q2: About how many acres do you own or lease?

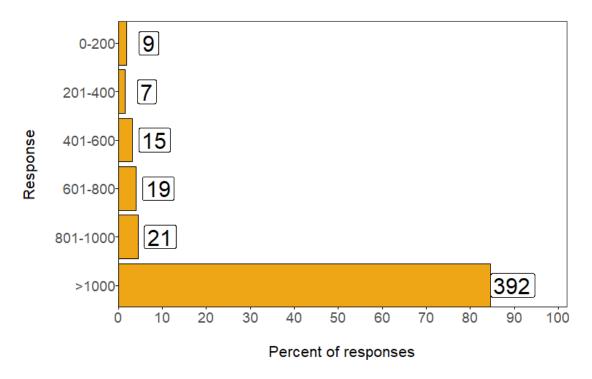


Figure 5. The approximate number of acres owned or leased by landowners as indicated by respondents to the 2020 Landowner Pronghorn Survey. The x-axis indicates the percentage of all respondents and the number to the right of the horizontal gold bars represents the actual number of respondents (N = 463).

### Pronghorn numbers and pronghorn damage

### Q3: To your knowledge, how frequently did you have antelope on your land in the past 24 months?

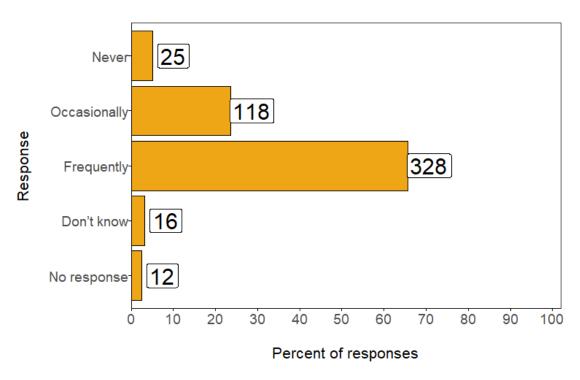


Figure 6. The frequency in which landowners had pronghorn on their land as indicated by respondents to the 2020 Landowner Pronghorn Survey. The x-axis indicates the percentage of all respondents and the number to the right of the gold bars represents the actual number of respondents (N = 499).

### Q4: How do you feel about the number of antelope on your land in the past 24 months?

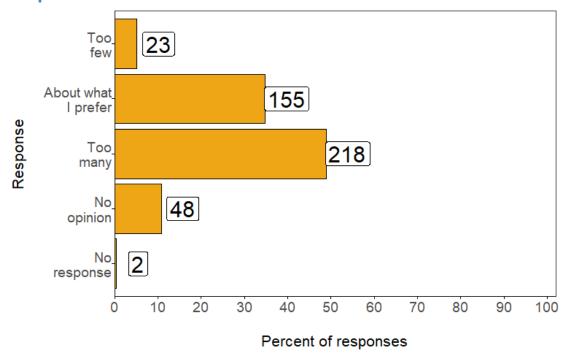


Figure 7. Attitude about the number of pronghorn that were present on the landowners' property in the previous 24 months indicated by respondents to the 2020 Landowner Pronghorn Survey. The x-axis indicates the percentage of all respondents and the number to the right of the gold bars represents the actual number of respondents. Responses are limited to those who reported having pronghorn on their land (N = 446).

### Q5: How much, if any, damage from antelope occurred on your land during the past 24 months?

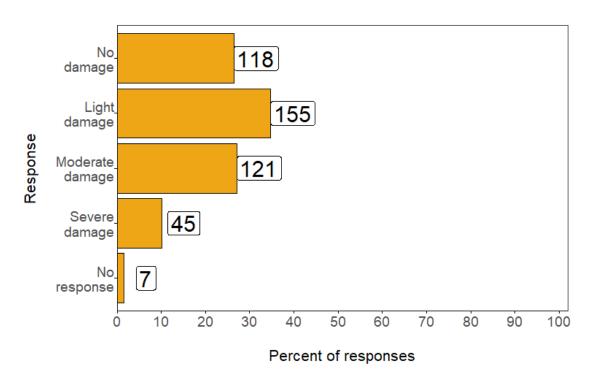


Figure 8. The severity of damage caused by pronghorn to landowner property in the previous 24 months indicated by respondents to the 2020 Landowner Pronghorn Survey. The x-axis indicates the percentage of all respondents and the number to the right of the gold bars represents the actual number of respondents. Responses are limited to those who reported having pronghorn on their land (N = 446).

### Q5a: What kind of damage from antelope occurred on your land during the past 24 months? (check all that apply)?

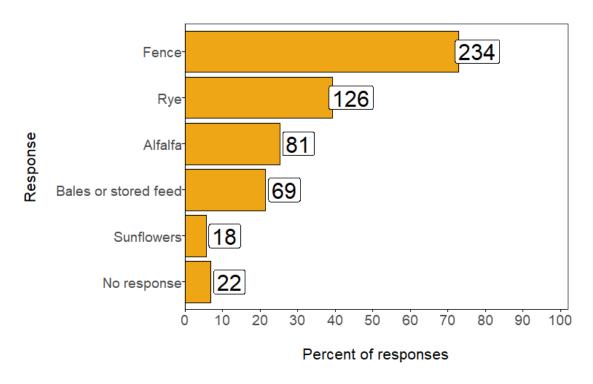


Figure 9. The kind of damage caused by pronghorn to landowner property in the previous 24 months indicated by respondents to the 2020 Landowner Pronghorn Survey. The x-axis indicates the percentage of all respondents and the number to the right of the gold bars represents the actual number of respondents. Responses are limited to those who reported that damage occurred (N = 321).

### Q5b: How acceptable or unacceptable is the amount of damage inflicted by Antelope in the past 24 months?

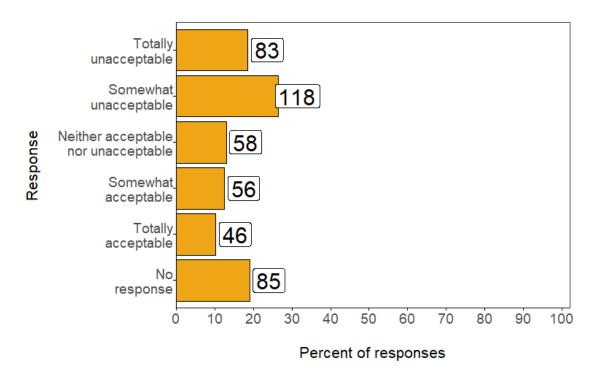


Figure 10. Acceptablity of damage caused by pronghorn to landowner property in the previous 24 months indicated by respondents to the 2020 Landowner Pronghorn Survey. The x-axis indicates the percentage of all respondents and the number to the right of the gold bars represents the actual number of respondents. Responses are limited to those who reported that damage occured (N = 446).

# Q6: Are you aware that the Nebraska Game and Parks Commission has mitigation techniques, supplies, and materials available to help reduce damage?

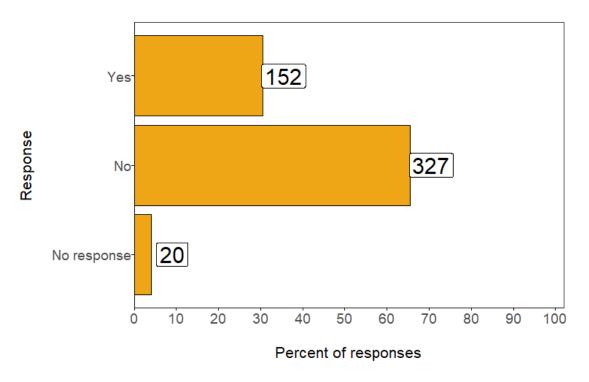


Figure 11. Awareness of NGPC pronghorn-mitigation indicated by respondents to the 2020 Landowner Pronghorn Survey. The x-axis indicates the percentage of all respondents and the number to the right of the gold bars represents the actual number of respondents (N = 499).

# Q6a: Are you aware that landowners can be put on a depredation list that would allow hunters to contact you for permission to hunt antelope?

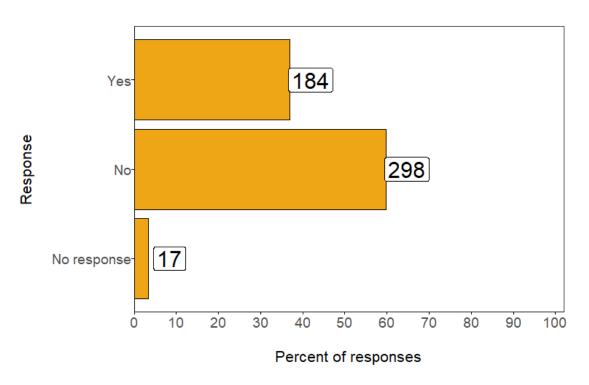


Figure 12. Awareness of NGPC ability to add landowners to depredation list indicated by respondents to the 2020 Landowner Pronghorn Survey. The x-axis indicates the percentage of all respondents and the number to the right of the gold bars represents the actual number of respondents (N = 499).

Q6b: Are you aware that the Nebraska Game and Parks Commission may issue permits to landowners to kill antelope outside the hunting season to help reduce damage to their property?

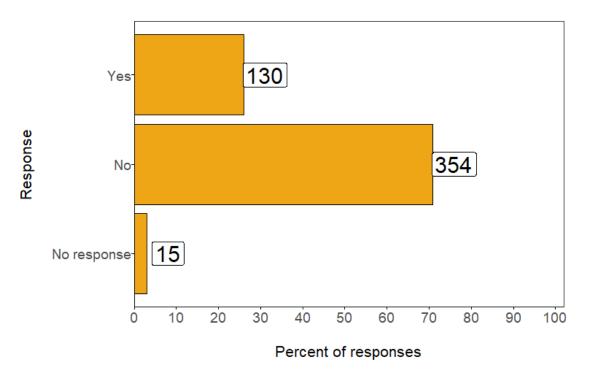


Figure 13. Awareness of NGPC ability to issue special permits indicated by respondents to the 2020 Landowner Pronghorn Survey. The x-axis indicates the percentage of all respondents and the number to the right of the gold bars represents the actual number of respondents (N = 499).

### Q7: Have you ever contacted the Nebraska Game and Parks Commission for assistance in reducing antelope damage on your land?

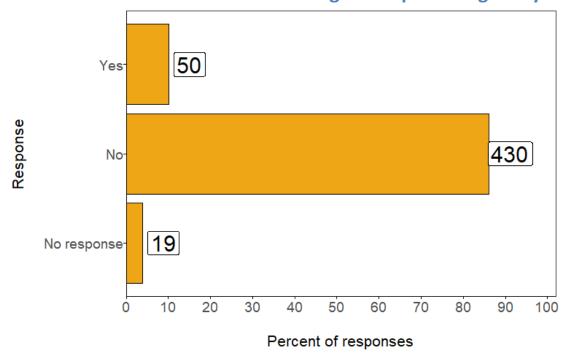


Figure 14. Whether or not landowner ever contacted NGPC for assistance in reducing antelope damage indicated by respondents to the 2020 Landowner Pronghorn Survey. The x-axis indicates the percentage of all respondents and the number to the right of the gold bars represents the actual number of respondents (N = 499).

## Q7a: In what year did you last contact the Nebraska Game and Parks Commission concerning damage caused by antelope?

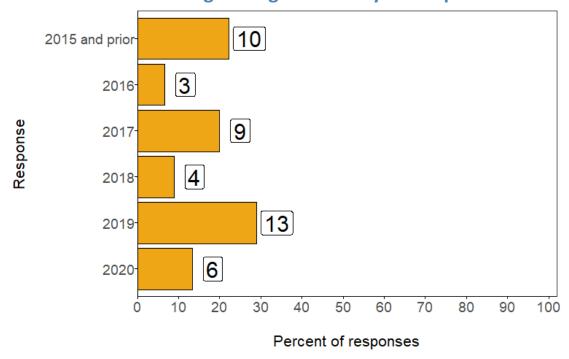


Figure 15. Year in which landowners most recently contacted Nebraska Game and Parks concerning damage caused by pronghorn indicated by respondents to the 2020 Landowner Pronghorn Survey. The x-axis indicates the percentage of all respondents and the number to the right of the horizontal gold bars represents the actual number of respondents. Responses are limited to those who reported that they contacted NGPC (N = 45).

### Q7b: How satisfied or dissatisfied were you with the assistance you received?

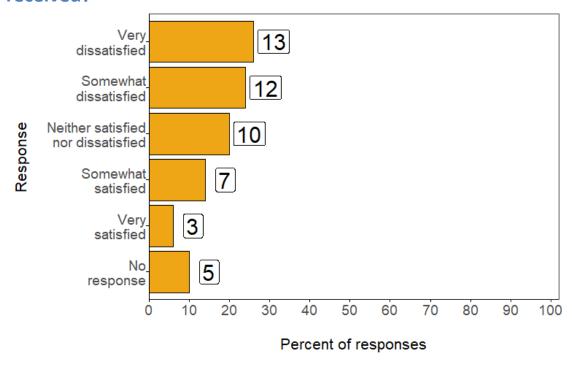


Figure 16. Satisfaction with NGPC indicated by respondents to the 2020 Landowner Pronghorn Survey. The x-axis indicates the percentage of all respondents and the number to the right of the gold bars represents the actual number of respondents. Responses are limited to those who reported that they contacted NGPC (N = 50). There were no responses from landowners owning property in the Eastern Sandhills AMU.

## Q8: Did anyone (including yourself) hunt antelope on your land in the past 24 months?

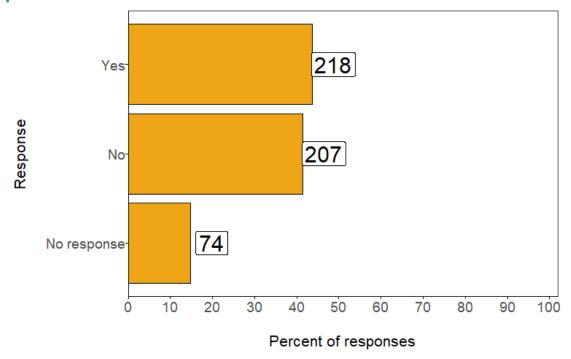


Figure 17. Whether anyone hunted pronghorn on landowner property in the previous 24 months indicated by respondents to the 2020 Landowner Pronghorn Survey. The x-axis indicates the percentage of all responses and the number to the right of the gold bars represents the actual number of responses (N = 499).

### Q8a: Did you yourself hunt antelope on your land in the past 24 months? (select all that apply)

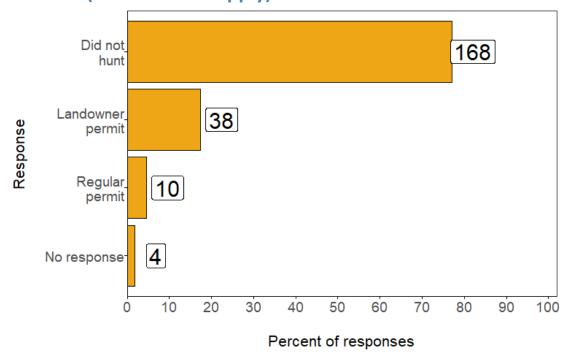


Figure 18. Type of permit landowner used to personally hunt pronghorn on their land in the previous 24 months indicated by respondents to the 2020 Landowner Pronghorn Survey. The x-axis indicates the percentage of all responses and the number to the right of the gold bars represents the actual number of responses (N = 218). Totals may exceed N as respondents could have chosen multiple responses. Responses are limited to those who reported that pronghorn hunting occured on their property in 2019.

### Q8b: How many total individuals (including yourself) hunted antelope on your land in the 2019 antelope hunting season?

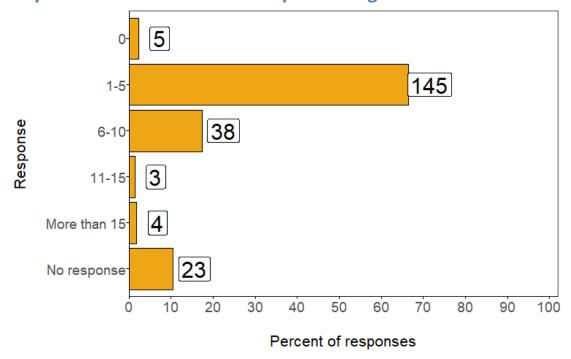


Figure 19. The total number of individuals who hunted pronghorn on the landowners' property in the past 24 months indicated by respondents to the 2020 Landowner Pronghorn Survey. The x-axis indicates the percentage of all respondents and the number to the right of the gold bars represents the actual number of respondents (N = 218). Responses are limited to those who reported that pronghorn hunting occurred on their property in 2019.

#### Q8c: How many antelope were harvested on your land in 2019?

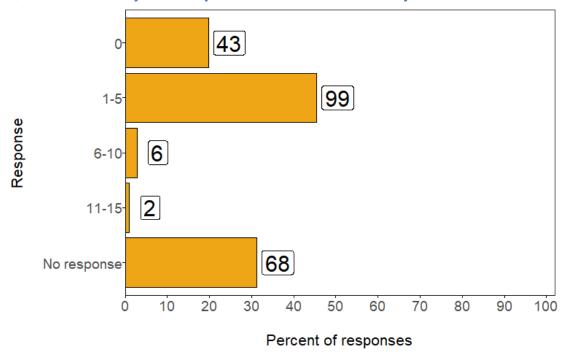


Figure 20. Total number of pronghorn harvested on landowner property indicated by respondents to the 2020 Landowner Pronghorn Survey. The x-axis indicates the percentage of all respondents and the number to the right of the gold bars represents the actual number of respondents. Respondes are limited to those who responded that someone hunted pronghorn on their property in 2019 (N = 218).

Q9: Currently, landowner permit holders are limited to hunting their own land. However, not all landowners have antelope on their land year round or during the hunting season and are unable to harvest antelope. Would you be in favor of allowing landowners to hunt throughout the entire unit, knowing this would likely increase the number of landowners applying for permits and decrease the odds of a landowner drawing a permit annually?

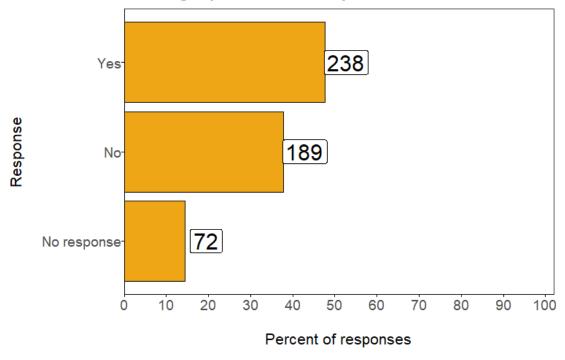


Figure 21. Whether landowners support allowing of hunting pronghorn throughout an AMU with a landowner permit indicated by respondents to the 2020 Landowner Pronghorn Survey. The x-axis indicates the percentage of all respondents and the number to the right of the gold bars represents the actual number of respondents (N = 499).