2020 Survey of Nebraska Landowner Attitudes on Elk Damage Abridged Report

Matthew Gruntorad, Christopher Chizinski, and Luke Meduna
May 24, 2021
# Table of Contents

Executive Summary .......................................................................................................................... 1

General Information .......................................................................................................................... 2
  Nebraska Landowner-Elk Project Objectives ............................................................................. 2
  Mode Selection ............................................................................................................................... 2
  Design and Item Selection .............................................................................................................. 3
  Analyses ........................................................................................................................................... 3

Survey population ............................................................................................................................. 3

Survey Results .................................................................................................................................... 5
  Property size and location .............................................................................................................. 5
    Respondent Elk Management Unit .......................................................................................... 5
  Q1: About how many acres do you own or lease? ..................................................................... 6

Elk numbers and elk damage .......................................................................................................... 7
  Q2: To your knowledge, how frequently did you have elk on your land in the past 24 months? .............................................................................................................................. 7
  Q3: How do you feel about the number of elk on your land in the past 24 months? ... 8
  Q4: How much, if any, damage from elk occurred on your land during the past 24 months? ................................................................................................................................. 9
  Q4a: What kind of damage from elk occurred on your land during the past 24 months? (check all that apply) ................................................................................................................. 10
  Q4b: How acceptable or unacceptable is the amount of damage from elk in the past 24 months? ................................................................................................................................. 11

NGPC assistance ............................................................................................................................ 12
  Q5: Are you aware that the Nebraska Game and Parks Commission has mitigation techniques, supplies, and materials available to help reduce damage? .............................................. 12
  Q6: Are you aware that the Nebraska Game and Parks Commission can add landowners to a depredation list that would allow hunters to contact you for permission to hunt elk? ......................................................................................................................... 13
  Q7: Are you aware that the Nebraska Game and Parks Commission may issue permits to landowners to kill elk outside the hunting season to help reduce damage to their property? ......................................................................................................................... 14
  Q8: Have you ever contacted the Nebraska Game and Parks Commission for assistance in reducing elk damage on your land? ......................................................................................................................... 15
  Q8a) In what year did you last contact the Nebraska Game and Parks Commission concerning damage caused by elk? ......................................................................................................................... 16
  Q8b: How satisfied or dissatisfied were you with the assistance you received? ........... 17
Elk hunting on landowner property ................................................................. 18
Q9: Did you yourself hunt elk on your land in the past 24 months? ......................... 18
Q10: Who else did you allow to hunt elk on your land in the past 24 months? (select all
that apply) ........................................................................................................ 19
Q10a: Which of the following did you allow others to hunt for on your land in the past
24 months? (Select all that apply) .................................................................... 20
Q10b: Did you allow antlerless hunters access prior to the bull season in the past 24
months? .............................................................................................................. 21
Q11: How many total individuals (including yourself) hunted elk on your land in the
past 24 months? ................................................................................................. 22
Q12: How many bull and antlerless elk were harvested on your land in the past 24
months? .............................................................................................................. 23
Landowner incentives for hunter access .................................................................. 25
Q13: The Nebraska Game and Parks Commission is looking for ways to increase hunter
access and harvest. First rank each of the following techniques to increase hunter
access and harvest on private land in the boxes to left of each item. 1 being your most
preferred and 5 being your least preferred. ............................................................. 25
Harvest and hunt permissions by Landowners who feel population is too high .......... 32
Harvest .................................................................................................................. 32
Hunt permission ................................................................................................... 33
Harvest and hunt permissions by Landowners who reported damage by elk .......... 34
Harvest .................................................................................................................. 34
Hunt permission ................................................................................................... 35
Executive Summary

- A majority of respondents reported owning over 1,000 acres of land within an Elk Management Unit (EMU; 55%).
- Most landowners reported that they frequently saw elk on their property within the last 24 months (40%) with the exception of landowners in the North Platte River EMU who most frequently reported only occasionally seeing elk (34%).
- Most landowners reported that there were too many elk on their property (36%) and most frequently reported that elk cause a moderate amount of damage (35%).
- The most frequent variety of elk damage was to landowner fencing (82%), and the majority of landowners find the damage to be somewhat unacceptable (29%).
- The majority of landowners were unaware that the Nebraska Game and Parks Commission (NGPC) offers mitigation assistance (60%), depredation permissions (56%), and special elk hunting permits to reduce elk damage (67%).
- Few landowners have ever contacted NGPC for assistance with elk damage (11%), and those that have most frequently contacted NGPC in 2019 (37%) or 2020 (15%).
- Most landowners did not personally hunt elk on their property (88%) nor allow other hunters access on their property (55%).
- Most landowners who did allow elk hunting permitted hunters to harvest bulls without restrictions (58%) and/or antlerless elk without restrictions (58%).
- Of those who allowed hunting, only 47% allowed antlerless-elk hunters access prior to the bull-hunting season.
- Awarding an additional preference point to landowners for each general permit filled and providing access incentive dollars for filled general permits were the most frequently ranked as the number 1 choice to incentivize landowners to allow more hunter access (27% and 34%, respectively).
General Information

This report describes responses to questions from the 2020 “Survey of Nebraska Landowner Attitudes on Elk Damage.” This survey was a tool to analyze Nebraska landowner perspectives on the elk herds residing on their land, the damage caused by elk herds, how landowners might be encouraged to allow elk hunting on their land, and how much elk-hunting landowners are currently allowing on their 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 Elk Management Units. General summaries of responses.

Nebraska Landowner-Elk Project Objectives

1. Gather information about Nebraska landowners who own property within Elk Management Units
2. Assess landowner perceptions about elk population size
3. Determine severity of damage caused by elk to landowner property
4. Gage landowner acceptance of property damage caused by elk
5. Gain a better understanding about how landowners respond to prospective elk hunters and evaluate landowner response to techniques aimed at encouraging landowners to allow more access to elk 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 Elk Management Units: Ash Creek, Bordeaux, Box Elder, Hat Creek, Niobrara East, Niobrara West, and North Platte River. 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.
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 elk on landowner property, how landowners feel about the number of elk on their property, the amount of damage caused by elk, landowner feelings about the amount of damage caused, how landowners respond to prospective elk hunters, and how landowners feel about techniques designed to encourage landowners to allow more access to elk hunters.

Analyses

This report depicts a general summary of how survey respondents responded to each question.

Survey population

Questionnaires were sent to 1,494 landowners. Landowner contacts were acquired by Nebraska Game and Parks Commission staff through county assessor records. The overall response was 562 landowners and the overall response rate to the survey project was 38%.

Figure 1. Elk Management Units for the 2020 Elk Landowner Survey.
Figure 2. Number of invitations sent to landowners in each Elk Management Unit for the 2020 Elk Landowner Survey. Values depicted in EMUs represent number of invitations sent (N = 1,494).

Figure 3. Response rates for each Elk Management Unit for the 2020 Elk Landowner Survey. Values depicted in EMUs represent the number of responses from that EMU (%; N = 562).
Survey Results

Property size and location

Respondent Elk Management Unit

Figure 4. The Nebraska Elk Management Unit in which respondents of the 2020 Landowner Elk 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 red bars represents the actual number of respondents (N = 552).
Q1: 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 Elk Survey. The x-axis indicates the percentage of all respondents and the number to the right of the horizontal orange bars represents the actual number of respondents (N = 517).
Elk numbers and elk damage

Q2: To your knowledge, how frequently did you have elk on your land in the past 24 months?

Figure 6. The frequency in which landowners had elk on their land as indicated by respondents to the 2020 Landowner Elk Survey. The x-axis indicates the percentage of all respondents and the number to the right of the orange bars represents the actual number of respondents (N = 552).
Q3: How do you feel about the number of elk on your land in the past 24 months?

Overall responses

Figure 7. Attitude about the number of elk that were present on the landowners’ property in the previous 24 months indicated by respondents to the 2020 Landowner Elk Survey. The x-axis indicates the percentage of all respondents and the number to the right of the orange bars represents the actual number of respondents. Responses are limited to those who reported having elk on their land (N = 403).
Q4: How much, if any, damage from elk occurred on your land during the past 24 months?

Figure 8. The severity of damage caused by elk to landowner property in the previous 24 months indicated by respondents to the 2020 Landowner Elk Survey. The x-axis indicates the percentage of all respondents and the number to the right of the orange bars represents the actual number of respondents. Responses are limited to those who reported having elk on their land (N = 403).
Q4a: What kind of damage from elk occurred on your land during the past 24 months? (check all that apply).

Figure 9. The kind of damage caused by elk to landowner property in the previous 24 months indicated by respondents to the 2020 Landowner Elk Survey. The x-axis indicates the percentage of all respondents and the number to the right of the orange bars represents the actual number of respondents. Responses are limited to those who reported that damage occurred (N = 307).
Q4b: How acceptable or unacceptable is the amount of damage from elk in the past 24 months?

![Bar chart showing responses to the acceptability of damage caused by elk.]

Figure 10. Acceptability of damage caused by elk to landowner property in the previous 24 months indicated by respondents to the 2020 Landowner Elk Survey. The x-axis indicates the percentage of all respondents and the number to the right of the orange bars represents the actual number of respondents. Responses are limited to those who reported that damage occurred (N = 307).
NGPC assistance

Q5: 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 elk-mitigation indicated by respondents to the 2020 Landowner Elk Survey. The x-axis indicates the percentage of all respondents and the number to the right of the orange bars represents the actual number of respondents (N = 552).
Q6: Are you aware that the Nebraska Game and Parks Commission can add landowners to a depredation list that would allow hunters to contact you for permission to hunt elk?

Figure 12. Awareness of NGPC ability to add landowners to depredation list indicated by respondents to the 2020 Landowner Elk Survey. The x-axis indicates the percentage of all respondents and the number to the right of the orange bars represents the actual number of respondents (N = 552).
Q7: Are you aware that the Nebraska Game and Parks Commission may issue permits to landowners to kill elk 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 Elk Survey. The x-axis indicates the percentage of all respondents and the number to the right of the orange bars represents the actual number of respondents (N = 552).
Q8: Have you ever contacted the Nebraska Game and Parks Commission for assistance in reducing elk damage on your land?

![Bar chart showing responses to Q8]

Figure 14. Whether respondent ever contacted NGPC for assistance in reducing elk damage indicated by respondents to the 2020 Landowner Elk Survey. The x-axis indicates the percentage of all respondents and the number to the right of the orange bars represents the actual number of respondents (N = 552).
8a) In what year did you last contact the Nebraska Game and Parks Commission concerning damage caused by elk?

Figure 15. Year in which landowners most recently contacted Nebraska Game and Parks concerning damage caused by elk indicated by respondents to the 2020 Landowner Elk Survey. The x-axis indicates the percentage of all respondents and the number to the right of the horizontal orange bars represents the actual number of respondents. Responses are limited to those who reported that they contacted NGPC (N = 46).
Q8b: How satisfied or dissatisfied were you with the assistance you received?

Figure 16. Satisfaction with NGPC indicated by respondents to the 2020 Landowner Elk Survey. The x-axis indicates the percentage of all respondents and the number to the right of the orange bars represents the actual number of respondents. Responses are limited to those who reported that they contacted NGPC (N = 58).
Elk hunting on landowner property

Q9: Did you yourself hunt elk on your land in the past 24 months?

Figure 17. Type of permit landowner used to personally hunt elk on their land in the previous 24 months indicated by respondents to the 2020 Landowner Elk Survey. The x-axis indicates the percentage of all responses and the number to the right of the orange bars represents the actual number of responses (N = 552).
Q10: Who else did you allow to hunt elk on your land in the past 24 months? (select all that apply)

Figure 18. Persons other than the landowner who hunted elk on the landowner’s property indicated by respondents to the 2020 Landowner Elk Survey. The x-axis indicates the percentage of all responses and the number to the right of the orange bars represents the actual number of responses (N = 552).
Q10a: Which of the following did you allow others to hunt for on your land in the past 24 months? (Select all that apply)

Figure 19. The type of elk landowners allowed others to harvest on their property indicated by respondents to the 2020 Landowner Elk Survey. The x-axis indicates the percentage of all responses and the number to the right of the orange bars represents the actual number of responses. Responses are limited to those who did not select that they did not allow any other hunters (N = 214).
Q10b: Did you allow antlerless hunters access prior to the bull season in the past 24 months?

![Bar chart showing responses to Q10b.]

Figure 20. Whether or not landowners allowed antlerless hunter access prior to the bull season indicated by respondents to the 2020 Landowner Elk Survey. The x-axis indicates the percentage of all respondents and the number to the right of the orange bars represents the actual number of respondents. Responses are limited to those who did not select that they did not allow any other hunters (N = 214).
Q11: How many total individuals (including yourself) hunted elk on your land in the past 24 months?

Figure 21. The total number of individuals who hunted elk on the landowners’ property in the past 24 months indicated by respondents to the 2020 Landowner Elk Survey. The x-axis indicates the percentage of all respondents and the number to the right of the orange bars represents the actual number of respondents \((N = 552)\).
Q12: How many bull and antlerless elk were harvested on your land in the past 24 months?

Bull elk responses

![Figure 22. The total number of bulls harvested on landowner property in the past 24 months indicated by respondents to the 2020 Landowner Elk Survey. The x-axis indicates the percentage of all respondents and the number to the right of the orange bars represents the actual number of respondents. Responses are limited to those who reported having elk on their land, and due to high item non-response rate, only those respondents who answered the question are represented (N = 306).]
Antlerless elk overall response

Figure 23. The total number of antlerless elk harvested on landowner property in the past 24 months indicated by respondents to the 2020 Landowner Elk Survey. The x-axis indicates the percentage of all respondents and the number to the right of the orange bars represents the actual number of respondents. Responses are limited to those who reported having elk on their land, and due to high item non-response rate, only those respondents who answered the question are represented (N = 290)
Landowner incentives for hunter access

Q13: The Nebraska Game and Parks Commission is looking for ways to increase hunter access and harvest. First rank each of the following techniques to increase hunter access and harvest on private land in the boxes to left of each item. 1 being your most preferred and 5 being your least preferred.

Ranking

Figure 24. Ranking of landowner preference for techniques to increase hunter access and harvest indicated by respondents to the 2020 Landowner Elk Survey. The x-axis indicates the percentage of all respondents and the number to the right of the orange bars represents the actual number of respondents (N = 552).
Approval

Now select your level of approval or disapproval for each technique in the options to the right of each item.

Award an additional preference point to landowners for each general permit elk harvested on their land.

Figure 25. Landowner approval to award an additional preference point to landowners for each general permit elk harvested on their land, indicated by respondents to the 2020 Landowner Elk Survey. The x-axis indicates the percentage of all respondents and the number to the right of the orange bars represents the actual number of respondents (N = 416). Only respondents who answered this question are depicted.
An early antlerless, primitive weapon (archery/muzzleloader) season permit sold over the counter to allow increased hunting opportunities prior to the bull season

Figure 26. Landowner approval to an early antlerless, primitive weapon (archery/muzzleloader) season permit sold over the counter to allow increased hunting opportunities prior to the bull season, indicated by respondents to the 2020 Landowner Elk Survey. The x-axis indicates the percentage of all respondents and the number to the right of the orange bars represents the actual number of respondents (N = 413). Only respondents who answered this question are depicted.
Provide access incentive dollars to landowners for each general elk permit that is filled on their land.

Figure 27. Landowner approval to provide access incentive dollars to landowners for each general elk permit that is filled on their land, indicated by respondents to the 2020 Landowner Elk Survey. The x-axis indicates the percentage of all respondents and the number to the right of the orange bars represents the actual number of respondents (N = 420). Only respondents who answered this question are depicted.
Increase overall antlerless permits available

Figure 28. Landowner approval to increase overall antlerless permits available, indicated by respondents to the 2020 Landowner Elk Survey. The x-axis indicates the percentage of all respondents and the number to the right of the orange bars represents the actual number of respondents (N = 422). Only respondents who answered this question are depicted.
Provide a specific Open Fields and Waters (OFW) program that would allow landowners to enroll their land into public access to target elk hunting/depredation areas.

Figure 29. Landowner approval to provide a specific Open Fields and Waters (OFW) program that would allow landowners to enroll their land into public access to target elk hunting/depredation areas, indicated by respondents to the 2020 Landowner Elk Survey. The x-axis indicates the percentage of all respondents and the number to the right of the orange bars represents the actual number of respondents (N = 410). Only respondents who answered this question are depicted.
Other - Overall responses

Figure 30. Landowner approval to enact alternative technique indicated by respondents to the 2020 Landowner Elk Survey. The x-axis indicates the percentage of all respondents and the number to the right of the orange bars represents the actual number of respondents (N = 109). Only respondents who answered this question are depicted.
Harvest and hunt permissions by Landowners who feel population is too high

Harvest

Figure 31. Elk harvest occurring on landowner property in the past 24 months indicated by respondents to the 2020 Landowner Elk Survey. The x-axis indicates the percentage of all respondents and the number to the right of the orange bars represents the actual number of respondents. Responses are limited to those who reported having elk on their land and that the elk population was too high (N = 144).
Figure 32. Whether or not other hunters were allowed to hunt elk on landowner property in the past 24 months indicated by respondents to the 2020 Landowner Elk Survey. The x-axis indicates the percentage of all respondents and the number to the right of the orange bars represents the actual number of respondents. Responses are limited to those who reported having elk on their land and that the elk population was too high (N = 137).
Harvest and hunt permissions by Landowners who reported damage by elk

Harvest

Figure 33. Elk harvest occurring on landowner property in the past 24 months indicated by respondents to the 2020 Landowner Elk Survey. The x-axis indicates the percentage of all respondents and the number to the right of the orange bars represents the actual number of respondents. Responses are limited to those who reported having elk on their land and that they experienced damage from elk (N = 307).
Hunt permission

Figure 34. Whether or not other hunters were allowed to hunt elk on landowner property in the past 24 months indicated by respondents to the 2020 Landowner Elk Survey. The x-axis indicates the percentage of all respondents and the number to the right of the orange bars represents the actual number of respondents. Responses are limited to those who reported having elk on their land and that they experienced damage from elk (N = 296).