



UNIVERSITY OF
Nebraska
Lincoln



NEBRASKA RANGELAND VEGETATION CHANGE SURVEY



Working in Nebraska

1. Which of these options makes up the **largest proportion** of your operation?

*(Please choose only **one** option.)*

- ☐ Cattle ranching
- ☐ Other livestock (for example: dairy, pigs, poultry), please specify: _____
- ☐ Farming
- ☐ Specialty farm products (for example: bees), please specify: _____
- ☐ Other, please specify: _____

2. How many years have you personally been ranching or farming?

Please enter a numeric value. _____ years

3. Please estimate the acreage of your operation in 2020.

Please enter a numeric value. If none, please enter a zero.

Owned acres _____ Acres rented from others _____

4. In what county in Nebraska is the largest proportion of your operation located?

Vegetation transitions and other changes on the landscape

The following questions ask about your experiences with changes on the landscape, including “**vegetation transitions**” on your operation. Specifically, we would like to know if you have noticed transitions from a mostly grassy landscape to one with more shrubs and trees.

5. Please indicate how strongly you agree or disagree with the following statements about **landscape changes in your area**. (For each row, please choose only **one** option.)

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
In my time managing my operation, I have noticed...					
...that vegetation has transitioned from mostly grasses to mostly shrubs/trees.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
...more variability in precipitation.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
...increased problems with invasive species on the landscape.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
...more flooding at certain times of year.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
...more severe drought at certain times of year.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

6. Please indicate how strongly you agree or disagree with the following statements about **the general effects of vegetation transitions from mostly grasses to mostly shrubs/trees**. (For each row, please choose only **one** option.)

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
Vegetation transitions will harm the profitability of rangelands in the long term.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Vegetation transitions will harm rangeland ecosystems.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Vegetation transitions are not a significant challenge to future agricultural productivity.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

7. Please rate how often you have taken the following actions to **manage vegetation transitions on your operation in the past three years**. (For each row, please choose only **one** option.)

	Never	Rarely	Occasionally	Always as appropriate
Chemical application	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Prescribed burning	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Rotational grazing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Mechanical removal	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other vegetation controls	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

8. For this question, imagine for a moment that vegetation transitions are occurring on your operation. Please indicate how strongly you agree or disagree with the following statements about **managing vegetation transitions from mostly grasses to mostly shrubs/trees on your operation**. Please respond to these questions as if **vegetation transitions are occurring on your operation**. (For each row, please choose only **one** option.)

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
If I take actions to manage vegetation transitions, it will inspire other producers to do so.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I doubt that other producers and I can collectively prevent vegetation transitions at a regional scale.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
If nearby producers take actions to manage vegetation, it will also reduce the chance of vegetation transitions on my operation.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I can easily change practices on my operation to manage vegetation transitions.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I do not think I can personally do anything about vegetation transitions on my operation.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I believe my actions on my operation can significantly reduce vegetation transitions happening on the greater landscape.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

9. Please indicate how strongly you agree or disagree with the following statements about **trying different ranching/farming practices on your operation to prevent vegetation transitions from mostly grasses to mostly shrubs/trees**. (For each row, please choose only **one** option.)

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
I frequently look for information about new ranching/farming techniques to prevent vegetation transitions on my operation.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I implement test plots to evaluate new ranching/farming practices to prevent vegetation transitions on my operation.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am willing to adopt management practices on my operation to prevent vegetation transitions on my neighbors' properties.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

10. Recent advances in digital technology make it possible to map different types of vegetation across the landscape. In some areas, these maps can provide information about how quickly vegetation is transitioning from grasses to shrubs/trees. This vegetation mapping can be used as an “early warning system” to help producers get ahead of vegetation transitions and ensure operation profitability. The next three questions ask about your views regarding this mapping technology.

Please indicate how strongly you agree or disagree with the following statements about **information provided by technology**. (For each row, please choose only **one** option.)

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
I am willing to consider using vegetation mapping to manage vegetation transitions on my operation.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would like more access to vegetation maps to help me manage vegetation transitions on my operation.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would attend a workshop to learn more about using vegetation mapping to manage vegetation transitions.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

11. Please indicate how strongly you agree or disagree with the following statements about **managing risk on your operation related to vegetation transitions from mostly grasses to mostly shrubs/trees.** (For each row, please choose only **one** option.)

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
I like to experiment with new management practices to overcome risks to my operation from vegetation transitions.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Through effective planning, I can overcome risks to my operation from vegetation transitions.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am willing to participate in state funded land conservation programs to reduce financial risks associated with vegetation transitions.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am willing to participate in federally funded land conservation programs to reduce financial risks associated with vegetation transitions.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am willing to participate in privately funded land conservation programs to reduce income risks associated with vegetation transitions.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
If needed, I can rely on other producers in my community for assistance managing risks created by vegetation transitions on my operation.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The risks of adopting new technology to manage vegetation transitions on my operation outweigh the benefits.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

12. Please indicate how strongly you agree or disagree with the following statements about **other people's efforts to manage vegetation transitions from mostly grasses to mostly shrubs/trees.** (For each row, please choose only **one** option.)

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
Most producers like me believe it's important to prevent vegetation transitions.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Most producers like me are taking actions to prevent vegetation transitions.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I trust the government to effectively manage vegetation transitions.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I believe current efforts to manage vegetation transitions in my area are not working well enough.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

About your professional social network

We would like to ask you about the people who you go to for advice about rangeland management and the operations of your ranch or farm. Please list these people, but only use their **first names or initials** to maintain privacy.

No one but the research team will see the names or initials you list and **we will never** use this information to identify or contact individuals.

As you answer these questions, **don't feel pressure to fill all 15 slots**. It's fine if people fit into multiple categories, but please make sure you ***only list each person once***.

13. First, think of the people with whom you work on your operation. Please list up to four people with whom you work.

Next, think of the people with whom you communicate about operating your ranch or farm. Please list up to four people with whom you communicate about your operation. Please consider people you have not already listed.

Next, think of the people to whom you go for rangeland management and operations advice. Please list up to four people with whom you consult for this information. Please consider people you have not already listed.

Finally, scan your list of contacts and decide: is anyone significant missing? If so, please add any additional people who should be included in your network of contacts regarding management activities on your operation.

The next few questions are about the people you just named. First, we will ask some questions about them, and then we will ask questions about your relationship with each person.

14. What is each person’s **primary** occupation? *(For each person, please choose only **one** option.)*

	Rancher, farmer, or producer	Scientist or researcher	Government agency manager or conservationist	Other conservation professional	Farm financier	Other
1	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
11	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
13	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
14	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
15	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

15. How many years have you known each person? Please enter a numeric value for each person.

If you’ve known a person for less than one year, please write 1.

	Years known
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	

16. What kinds of information do you mainly receive from each person?
*(For each person, please select **all options** that apply.)*

Information about...

	Ranch or farm operations	Ranch or farm technology	Conservation practices (prescribed burning, weed control, etc.)	Financial or insurance programs (CRP, EQIP, etc.)	Non-operations
1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

17. How frequently do you interact with each person? Please include both face-to-face and electronic interactions.

*(For each person, please choose only **one** option.)*

	Daily	2-3 times per week	Weekly	2-3 times per month	Monthly	Less than once per month
1	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
11	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
13	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
14	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
15	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

This question is to find out whether your social contacts know each other. Feel free to copy the list of your contacts into the header row of the table opposite. Make sure that the names and numbers match.

18. Please look across each person's ROW.

If the person in the row and the person above know each other, place a check in the appropriate box. For example, say you named John, Paul, George and Ringo as your social contacts. For this question, you would go across John's ROW and put checks under Paul, George and Ringo, because John and Paul know each other, John and George know each other, and John and Ringo know each other. For your contacts who don't know each other, leave the boxes between them blank.

Take your time and be as accurate and complete as possible.

[illegible]

First Names or Initials	
Person 1	
Person 2	
Person 3	
Person 4	
Person 5	
Person 6	
Person 7	
Person 8	
Person 9	
Person 10	
Person 11	
Person 12	
Person 13	
Person 14	
Person 15	

19. Due to COVID-19, communication with the people I listed above has been...

*(Please choose only **one** option.)*

- ☐ ...very negatively affected.
- ☐ ...somewhat negatively affected.
- ☐ ...unaffected.
- ☐ ...somewhat positively affected.
- ☐ ...very positively affected.

20.a. Are there groups of people in your area that regularly meet to discuss rangeland management?

*(Please choose only **one** option.)*

- ☐ No → skip to **Question 21**
- ☐ Yes → continue to **Question 20.b**

20.b. What's the extent of your involvement with these group(s)? *(Please choose only **one** option.)*

- ☐ I am not involved in any groups. → skip to **Question 21**
- ☐ I am heavily involved with at least one group. → continue to **Question 20.c**
- ☐ I am moderately involved with at least one group. → continue to **Question 20.c**
- ☐ I am minimally involved with at least one group. → continue to **Question 20.c**

20.c. What's the longest amount of time you have been involved in any of these groups? *(Please choose only **one** option.)*

- ☐ Less than 1 year
- ☐ 1-3 years
- ☐ 4-10 years
- ☐ 11-20 years
- ☐ More than 20 years

Economic decision making

In this section, we want to understand a little about your approach to decision making. We will ask you five questions about a hypothetical opportunity to win a cash payment. In each question, you will be asked to choose one of two options.

- 21.** Option A guarantees a payment of \$25,000 in all five choices, while in option B there is a 50-50 chance of winning a certain amount. **Which option would you choose for each question?**

Although this is a hypothetical exercise and no real payments are involved, please think carefully before making your choice for each question. *(For each numbered row, please choose only **one** option.)*

Question	Option A		Option B
1.	<input type="radio"/> \$25,000	OR	<input type="radio"/> 50% chance of \$48,000, and 50% chance of \$1000
2.	<input type="radio"/> \$25,000	OR	<input type="radio"/> 50% chance of \$50,000, and 50% chance of \$1000
3.	<input type="radio"/> \$25,000	OR	<input type="radio"/> 50% chance of \$52,000, and 50% chance of \$1000
4.	<input type="radio"/> \$25,000	OR	<input type="radio"/> 50% chance of \$54,000, and 50% chance of \$1000
5.	<input type="radio"/> \$25,000	OR	<input type="radio"/> 50% chance of \$56,000, and 50% chance of \$1000
6.	<input type="radio"/> \$25,000	OR	<input type="radio"/> 50% chance of \$58,000, and 50% chance of \$1000

About you

This final section asks about you and your operation.

- 22.** Approximately what percentage of your household income came from agriculture in 2019?

*(Please choose only **one** option.)*

- ☐ 0-19%
- ☐ 20-39%
- ☐ 40-59%
- ☐ 60-79%
- ☐ 80-100%

- 23.** In what year were you born? _____

- 24.** Which best describes your gender? *(Please choose only **one** option.)*

- ☐ Male
- ☐ Female
- ☐ Other

About you *(continued)*

25. What is the highest level of school you have completed? *(Please choose only **one** option.)*

- ☐ Grade school
- ☐ High school / GED
- ☐ Some college or vocational training
- ☐ 2-yr college
- ☐ 4-yr college
- ☐ Postgraduate

26. What was your total household income before taxes in 2019? *(Please choose only **one** option.)*

- ☐ Less than \$25,000
- ☐ \$25,000 - \$49,999
- ☐ \$50,000 - \$99,999
- ☐ \$100,000 - \$149,999
- ☐ \$150,000 - \$249,999
- ☐ Greater than \$250,000

Thank you for taking this survey. If you have any comments, please let us know here:

Please use the postage-paid envelope to mail the completed survey back to us.

Return address:

Center for Resilience in Agricultural Working Landscapes
203 Keim Hall
University of Nebraska-Lincoln - East Campus
Lincoln, NE 68583