

Nebraska Game & Parks Commission

2021-2022 Waterfowl Season Dates Preferences

Survey Report

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27 January 2021

In the fall of 2020, the US Fish & Wildlife Service's Service Regulations Committee approved zone and unit changes for ducks and geese in Nebraska (Appendix 1-4). This process is allowed to occur once every five years per the US Fish and Wildlife Service's Federal Frameworks. To determine waterfowl hunter preferences for season dates within these new zones and units, the Nebraska Game & Parks Commission (NGPC) conducted a survey of hunters who had hunted waterfowl in Nebraska between 2017 and 2019. Based on Harvest Information Program (HIP) registrations, we selected all hunters who indicated that they had hunted ducks or geese. This sample was then divided based on whether the hunter had provided an email address or only a postal address. The initial sample sizes for hunters with emails was 13,714 hunters, and for hunters with only a postal address was 9,953 hunters. Hunters in the email group received an email invitation to participate in the survey on 9 November 2020. Those hunters in the postal group received a postcard containing a unique username and the URL for the survey. These postcards were mailed from Lincoln on 10 November 2020. The survey closed to all participants on 5 December 2020. Email invitees received 2 reminder emails on 16 and 30 November. Postcard recipients received only the initial postcard invitation.

At the close of the survey, we received 2,385 responses from email invitees, and 77 responses from postcard invitees (2,462 total responses). There were 821 email bounces for email invitees, resulting in an effective sample size of 12,893 and a response rate of 18.5%. Among postcard invitees, there were 165 addresses that could not be corrected, giving an effective sample size of 9,788 and a response rate of 0.80%. We note that although the postcards provided the recipients with their username, the survey system still prompted for a username and password, confusing many potential participants. However, everyone who contacted NGPC regarding this issue were provided instructions that allowed them to successfully complete the survey. Overall, the survey response rate was 10.9%. Respondents took, on average, 8.3 minutes to complete the survey (range: 0.62-132.3 minutes). Respondent names, email addresses (if available), username, and state of residency were seeded into the response database so that when a responding hunter completed the survey, this information was appended to their responses. To prevent "ballot stuffing," once a responding hunter completed the survey, their username became inactive and unusable.

Results

The tables and figures below summarize the responses received from both email and postcards groups combined. Sample sizes for postcard invitees were too small to provide reliable estimates when broken down by invitation type, so the results below provide breakdowns based on residency (Nebraska/Not Nebraska). Among respondents, 2,038 (82.8%) were Nebraska residents and 424 (17.2%) were non-resident. Respondents were representative of the sample population of HIP registrants (Table 1).

Because questions were voluntary, not all responding hunters completed every question. Sample sizes provided in the table legends indicate how many respondents completed that particular question.

Table 1. Comparison of demographic characteristics of respondents ($n = 2,462$) and all HIP registrants in the sample frame ($n = 23,667$).

Demographic Variable	Level	Sample Frame	Respondents
Residency	Resident	83.1%	80.0%
	Non-resident	16.9%	20.0%
Sex	Male	98.0%	98.4%
	Female	2.0%	1.6%
Age	Mean	46.0	49.7
	Median	44	50

Table 2. Number and percentage of respondents ($n = 2,434$) who reported hunting ducks during the past 3 years overall and by residency.

Did you hunt DUCKS in the last three (3) years?	Overall	Resident	Non-resident
Yes	2227	1859	368
	91.5%	92.3%	87.8%
No	207	156	51
	8.5%	7.7%	12.2%

Table 3. Number and percentage of respondents ($n = 2,338$) hunting in particular duck zones (historical) during the season in which they most recently hunted ducks by residency. Because respondents could choose more than one duck zone, number of selections could exceed total sample size and (column) percentages will not sum to 100.

Which of the previous duck zones did you hunt the last season you hunted?	Overall	Resident	Non-resident
Zone 1	192	119	73
	8.2%	6.1%	18.4%
Zone 2	813	714	99
	34.8%	36.8%	25.0%
Zone 3	1547	1299	248
	66.2%	66.9%	62.6%
Zone 4	525	495	30
	22.5%	25.5%	7.6%

Table 4. Number and percentage of respondents ($n = 2,402$) who reported hunting geese during the past 3 years overall and by residency.

Did you hunt GEESE in the last three (3) years?	Overall	Resident	Non-resident
Yes	2152	1813	339
	89.6%	91.2%	82.1%
No	250	176	74
	10.4%	8.8%	17.9%

Table 5. Number and percentage of respondents ($n = 2,235$) hunting in particular goose units (historical) during the season in which they most recently hunted geese by residency. Because respondents could choose more than one goose unit, number of selections could exceed total sample size and percentages will not sum to 100.

Which of the previous duck zones did you hunt the last season you hunted?	Overall	Resident	Non-resident
Niobrara	72	49	23
	3.2%	2.6%	6.5%
North-Central	450	379	71
	20.1%	20.1%	20.1%
East	680	644	36
	30.4%	34.2%	10.2%
Platte	899	802	97
	40.2%	42.6%	27.4%
Panhandle	493	338	155
	22.1%	18.0%	43.8%

Table 6. Number and percentage of respondents ($n = 2,405$) who indicated hunting on various types of land while waterfowl hunting during the past 3 years by residency. Because respondents could choose more than one option, number of selections could exceed the total sample size and (column) percentages will not sum to 100.

Where did you do most of your waterfowl hunting over the past 3 years?	Overall	Resident	Non-resident
Private land owned by me or my family	615	532	83
	25.6%	26.7%	20.1%
Private land, w/ permission for access obtained from landowner	1330	1154	176
	55.3%	57.9%	42.6%
Private land, with daily or seasonal fee or lease paid	503	411	92
	20.9%	20.6%	22.3%
Public land owned or leased by state wildlife agency or US Fish & Wildlife Service (e.g., National Wildlife Refuge, Waterfowl Production Area), or walk-in access program	682	568	114
	28.4%	28.5%	27.6%
Public land owned or lease by an agency other than the state wildlife agency or the US Fish & Wildlife Service	235	197	38
	9.8%	9.9%	9.2%

Table 7. Number and percentage of respondents ($n = 2,447$) reporting whether they were planning to hunt ducks during the 2021-2022 season by residency.

Do you plan to hunt ducks during the 2021-2022 season?	Overall	Resident	Non-resident
Yes	2203	1848	355
	90.0%	91.3%	83.9%
No	244	176	68
	10.0%	8.7%	16.1%

Table 8. Number and percentage of respondents ($n = 2,120$) who planned to hunt ducks who indicated that they would hunt specific new duck zones by residency. Because respondents could select multiple duck zones, sample sizes among selections may not sum to the overall sample size and (column) percentages will not sum to 100.

In which new duck zone(s) do you plan to hunt?	Overall	Resident	Non-resident
Zone 1	167	113	54
	7.9%	6.3%	16.0%
Zone 2	1090	982	108
	51.4%	55.1%	32.0%
Zone 3	679	493	186
	32.0%	27.7%	55.2%
Zone 4	943	900	43
	44.5%	50.5%	12.8%

Table 9. Number and percentage of respondents ($n = 1,934$) who planned to hunt ducks who indicated that they had a preference for season dates for the 2021-2022 season by residency.

Do you have a preference for the season dates for the new duck zones?	Overall	Resident	Non-resident
Yes	1242	1070	172
	64.2%	65.7%	56.2%
No	692	558	134
	35.8%	34.3%	43.8%

Table 10. Number and percentage of respondents ($n = 661$) who indicated that they had no preferences for duck season dates by the new duck zone they planned to hunt.

In which of the following new duck zones do you intend to hunt?	Respondents with "No" preference for season dates
Zone 1	57
	8.6%
Zone 2	352
	53.3%
Zone 3	222
	33.6%
Zone 4	232
	35.1%

Figure 1. Set combination plot showing the frequency of selection of combinations of new duck zones respondents indicated they were planning on hunting during the 2021-2022 duck seasons (cf. Table 8).

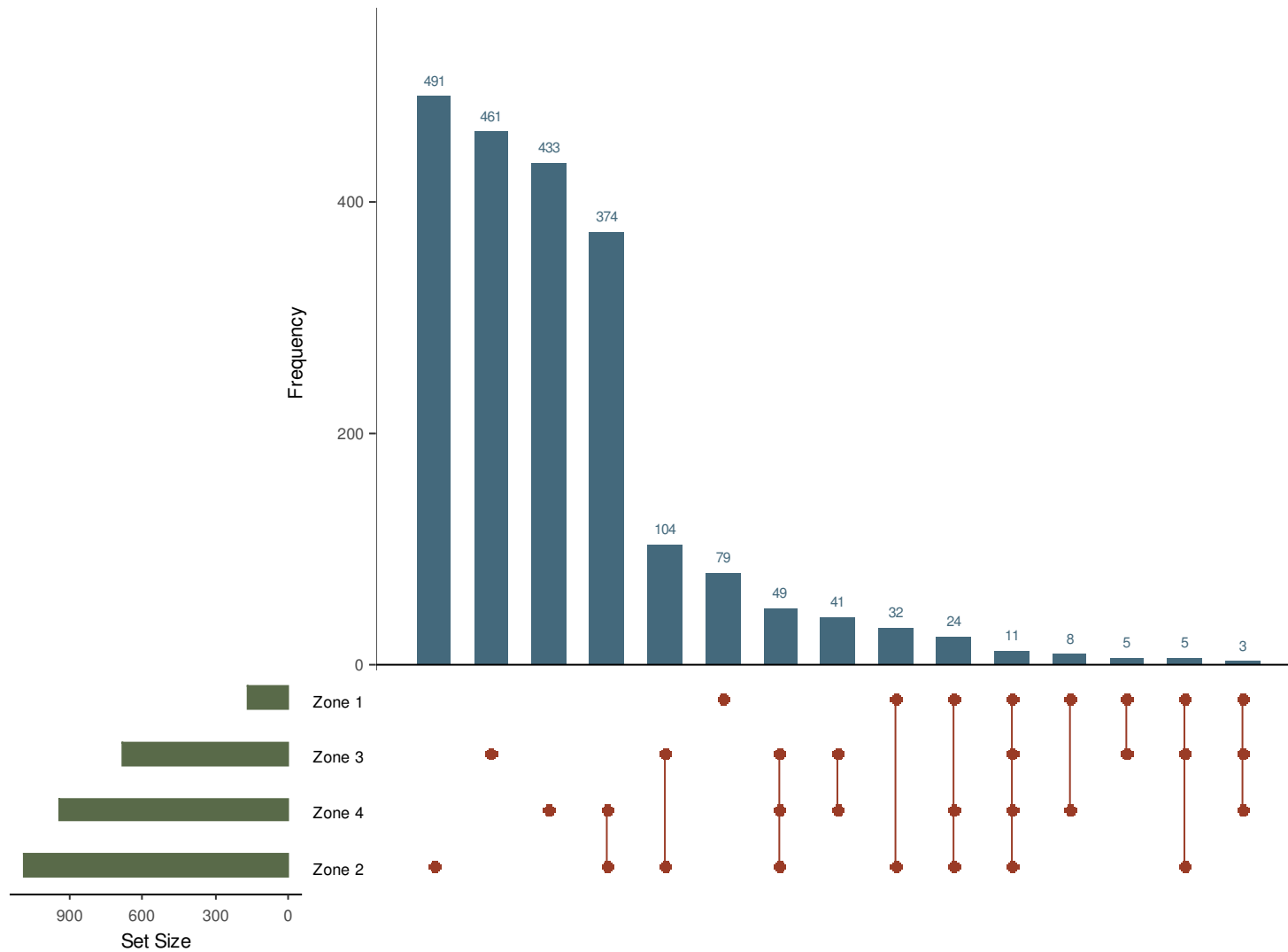


Table. 11 Number and percentage of respondents ($n = 1,514$) indicating preferences for the start of the September teal season by residency. Because respondents could select more than one option sample sizes among responses may not total the total sample size and (column) percentages may not sum to 100.

Indicate your preference for when the opening day of the September teal season:	Overall	Resident	Non-resident
Labor Day weekend	247	206	41
	16.3%	15.9%	18.6%
First weekend after Labor Day	381	335	46
	25.2%	25.9%	20.8%
September 1-16 every year	431	386	45
	28.5%	29.9%	20.4%
Other	25	21	4
	1.7%	1.6%	1.8%
Does not matter to me	454	369	85
	30.0%	28.5%	38.5%

Table 12. Unedited responses from hunters selecting “Other” for their preferences for the September teal season opener.

Start in November
A week later then you have been setting teal
Get rid of the teal season
Later because there are no duck here when season opens and season is over before they are here
October
September 5-21
9-1 through the third weekend in September
Last week in August. Most teal are here in mid august
Middle of Sept
Begin later in September. 3rd weekend perhaps.
October so the duck season can extend through December, ducks have been late a few years
last two weeks of September
Teal never really get to morrill county until the second to third week of september. this is bad
I prefer last 3 weeks in September
As late as possible. I don't think we should have an early season. The ducks don't leave until Jan.
Close it
Eliminated early teal season and Add on to the end
Later dates
It should be strictly limited to private land only dont waste money pumping public land so early
Keep the season the Same as last year

Table 13. Number and percentage of respondents ($n = 1,517$) indicating preferences for various scenarios related to a 74-day duck season with no splits.

Which of the following scenarios would you prefer for a 74-day duck season with no splits?	Overall	Resident	Non-resident
I prefer duck season to start on a Saturday and end on a Tuesday	467	411	56
	30.8%	31.7%	25.3%
I prefer duck season to start on a Thursday and end on a Sunday	429	365	64
	28.3%	28.2%	29.0%
Start the duck season on the same date each year, regardless of which weekday it is	272	241	31
	17.9%	18.6%	14.0%
I do not have a preference	349	279	70
	23.0%	21.5%	31.7%

Table 14. Number and percentage of respondents ($n = 1,494$) indicating preferences for various scenarios related to a 74-day duck season with no splits by the duck zone they last hunted in over the past 3 years.

Which scenario do you prefer for a 74-day duck season with no splits?	Last Duck Zone Hunted:			
	Zone 1	Zone 2	Zone 3	Zone 4
I prefer duck season to start on a Saturday and end on a Tuesday	40	171	300	133
	35.1%	31.8%	29.0%	37.6%
I prefer duck season to start on a Thursday and end on a Sunday	30	142	308	96
	26.3%	26.4%	29.7%	27.1%
Start the duck season on the same date each year, regardless of which weekday it is	16	97	184	64
	14.0%	18.0%	17.8%	18.1%
I do not have a preference	28	128	244	61
	24.6%	23.8%	23.6%	17.2%

Table 15. Number and percentage of respondents ($n = 1,488$) indicating which new duck zone they wanted to indicate preferences for by residency. Because respondents could select multiple duck zones, the sample sizes among responses may not sum to the overall sample size and (column) percentages may not sum to 100.

Which of the following new duck zones would you like to make season date preference selections for?	Overall	Resident	Non-resident
Zone 1	131	104	27
	8.8%	8.2%	12.6%
Zone 2	681	616	65
	45.8%	48.4%	30.4%
Zone 3	473	349	124
	31.8%	27.4%	57.9%
Zone 4	688	653	35
	46.2%	51.3%	16.4%

Figure 2. Overall respondent support and opposition to duck season dates for the new **Zone 1**. Support and opposition were scored on a 5 point scale with -2 = strongly oppose and 2 = strongly support. Mean agreement scores for each set of season dates are also provided.

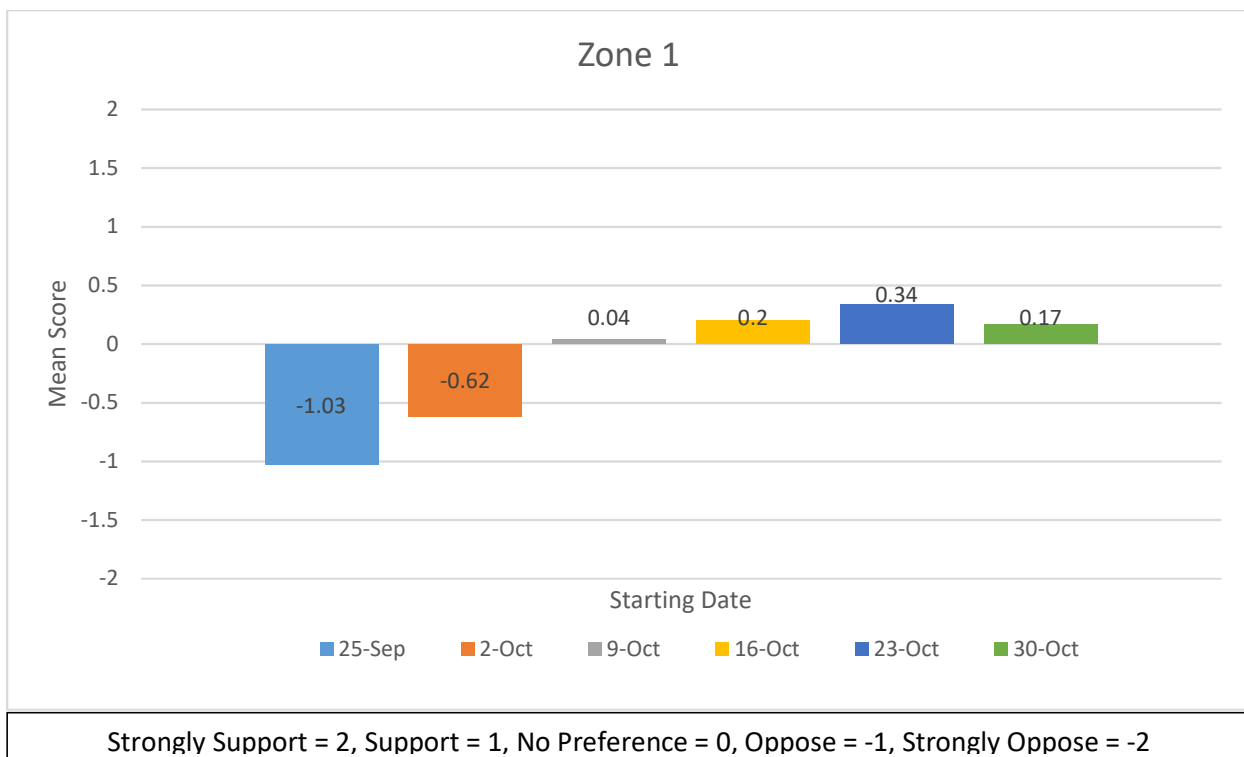


Figure 3. Overall respondent support and opposition ($n = 643$) to duck season dates for the new **Zone 2**. Support and opposition were scored on a 5 point scale with -2 = strongly oppose and 2 = strongly support. Mean agreement scores for each set of season dates are also provided.

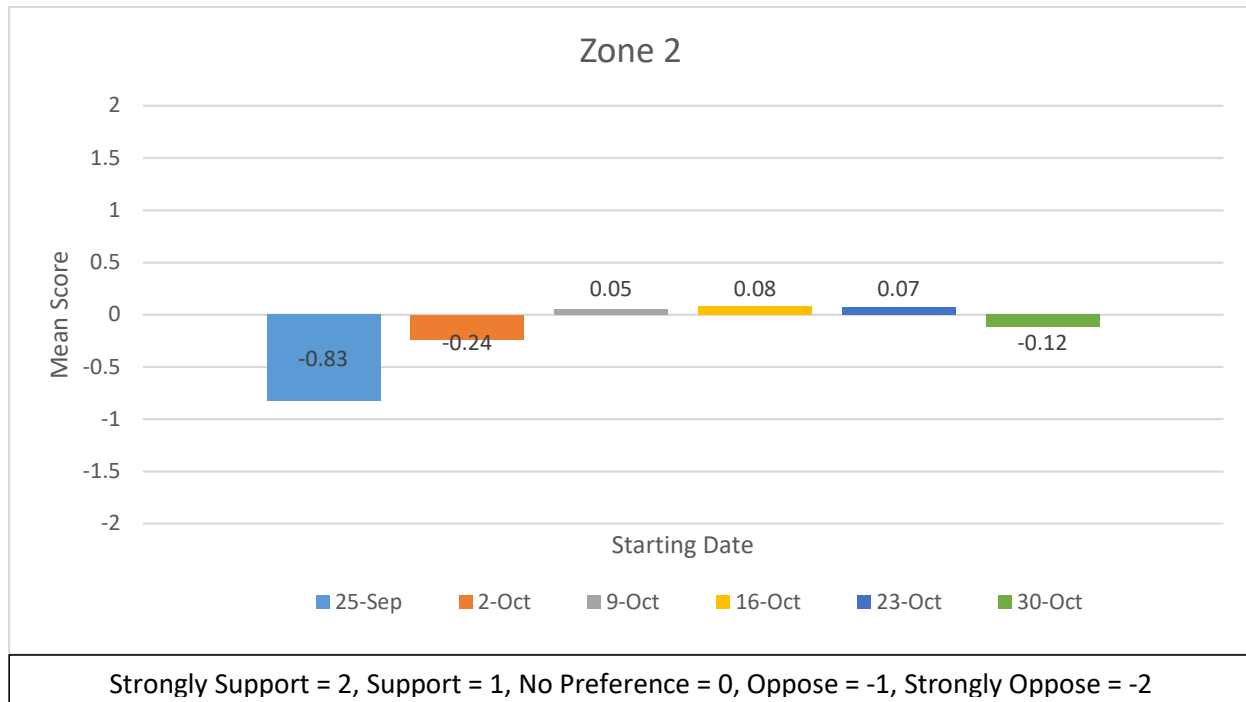


Figure 4. Overall respondent support and opposition ($n = 452$) to duck split season dates for the new **Zone 3**. Support and opposition were scored on a 5 point scale with -2 = strongly oppose and 2 = strongly support. Mean agreement scores for each set of season dates are also provided.

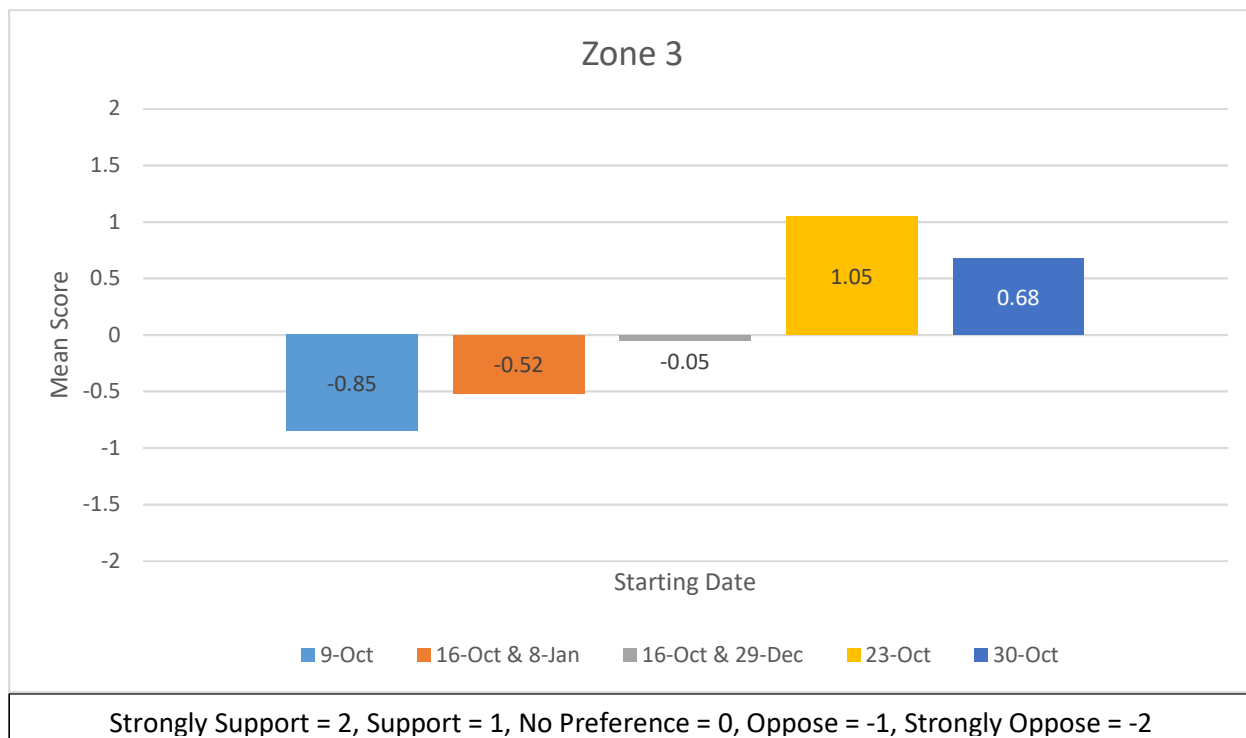


Figure 5. Overall respondent support and opposition ($n = 673$) to duck season dates for the new **Zone 4**. Support and opposition were scored on a 5 point scale with -2 = strongly oppose and 2 = strongly support. Mean agreement scores for each set of season dates are also provided.

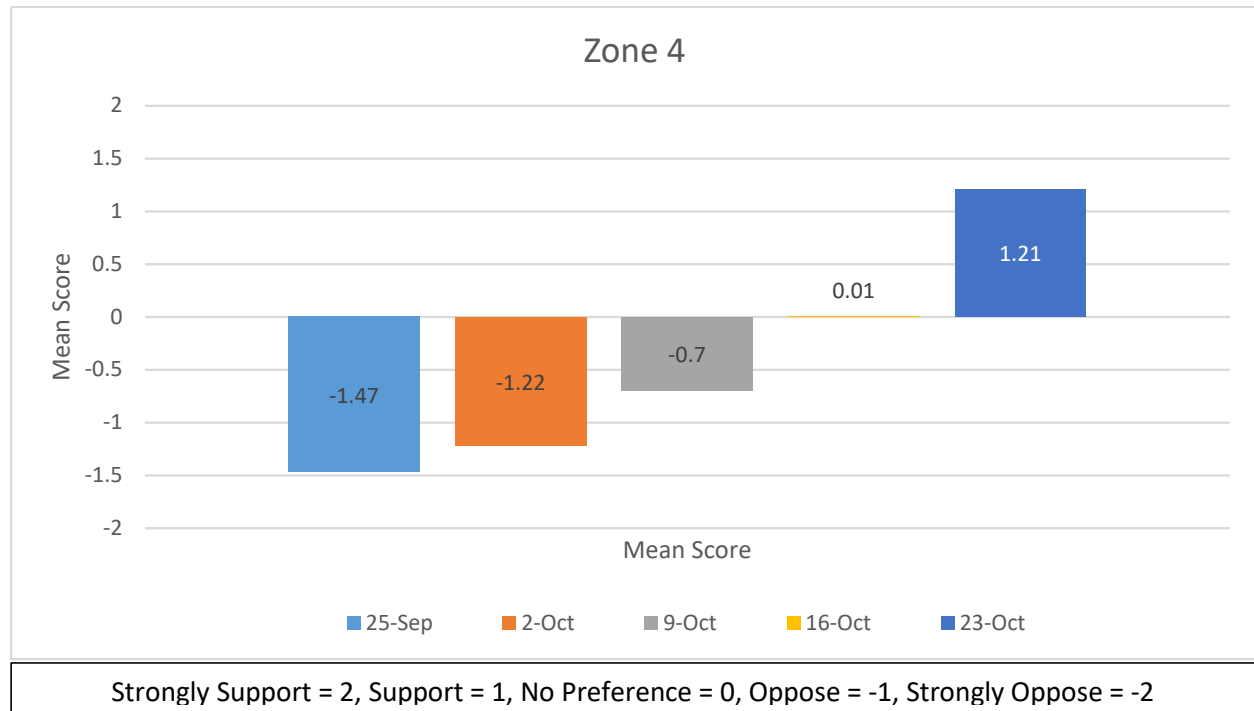


Table 16. Number and percentage of respondents ($n = 2,451$) indicating whether they plan on hunting geese during the 2021-2022 seasons by residency.

Do you plan to hunt geese in the 2021/2022 season?	Overall	Resident	Non-resident
Yes	2162	1839	323
	88.2%	90.6%	76.5%
No	289	190	99
	11.8%	9.4%	23.5%

Table 17. Number and percentage of hunters ($n = 2,039$) indicating which of the new goose units they plan to hunt, if they intend to hunt, by residency. Because respondents could select multiple units, sample sizes among selections will not sum to the overall sample size and (column) percentages will not sum to 100.

In which new goose unit do you plan to hunt?	Overall	Resident	Non-resident
Niobrara	44	29	15
	2.2%	1.7%	4.9%
North-Central	321	257	64
	15.7%	14.8%	21.0%
Platte River	1674	1448	226
	82.1%	83.5%	74.1%

Table 18. Number and percentage of respondents ($n = 1,999$) indicating whether they had preferences for season dates and bag limits for the 2021-2022 goose season by residency.

Do you have a preference for goose season dates and bag limits?	Overall	Resident	Non-resident
Yes	1255	1108	147
	62.8%	65.1%	49.5%
No	744	594	150
	37.2%	34.9%	50.5%

Table 19. Number and percentage of respondents ($n = 564$) who indicated that they had no preferences for goose season dates by the new goose unit they planned to hunt.

In which of the following new goose units do you intend to hunt in?	Respondents with "no" preference for season dates
Niobrara	18
	2.6%
North-Central	112
	16.1%
Platte River	564
	81.3%

Table 20. Number and percentage of respondents ($n = 1,419$) indicating that they wanted to indicate their preferences for the new goose units by residency. Because respondents could select multiple units, the sample sizes among selections may not sum to the total sample size and (column) percentages may not sum to 100.

Which units would you like to make season date preference choices for?	Overall	Resident	Non-resident
Niobrara	63	57	6
	4.4%	4.6%	3.4%
North-Central	297	257	40
	20.9%	20.6%	23.0%
Platte River	1226	1093	133
	86.4%	87.8%	76.4%

Figure 6. Overall respondent support and opposition ($n = 61$) to goose season dates for the new unit **Niobrara**. Support and opposition were scored on a 5 point scale with -2 = strongly oppose and 2 = strongly support. Mean agreement scores for each set of season dates are also provided.

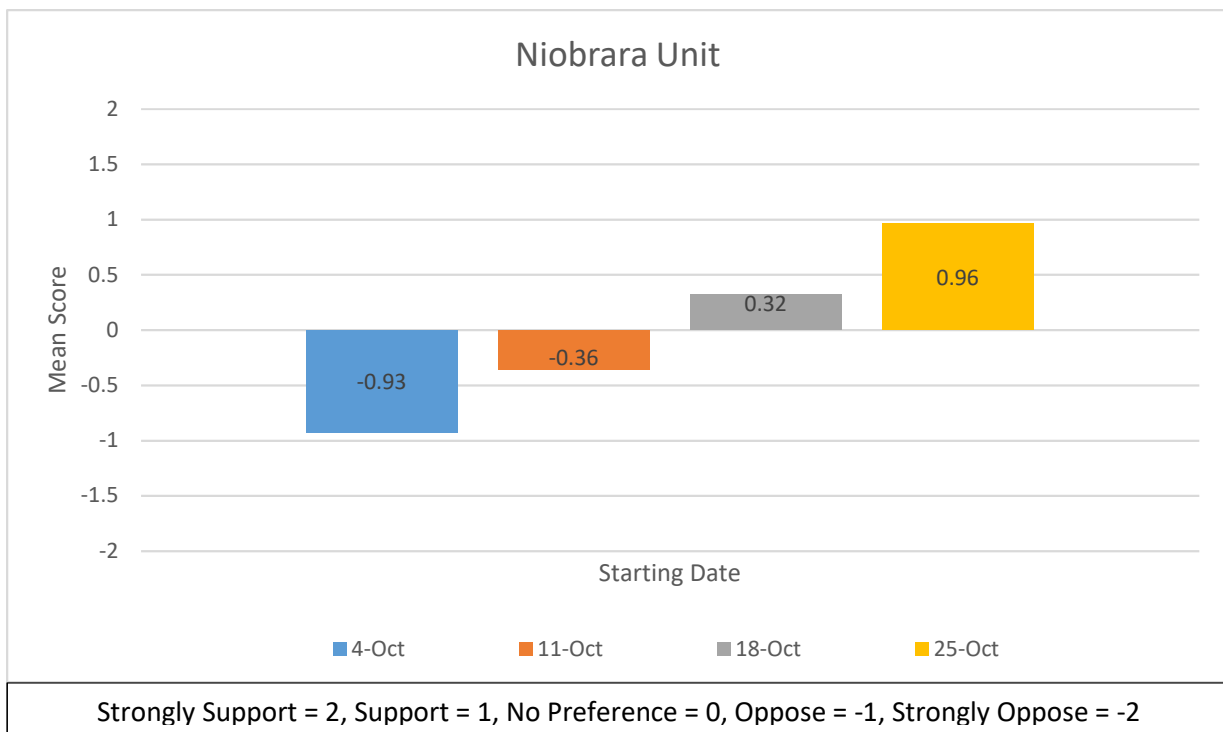


Figure 7. Overall respondent support and opposition ($n = 275$) to goose season dates for the new **North-central** unit. Support and opposition were scored on a 5 point scale with -2 = strongly oppose and 2= strongly support. Mean agreement scores for each set of season dates are also provided.

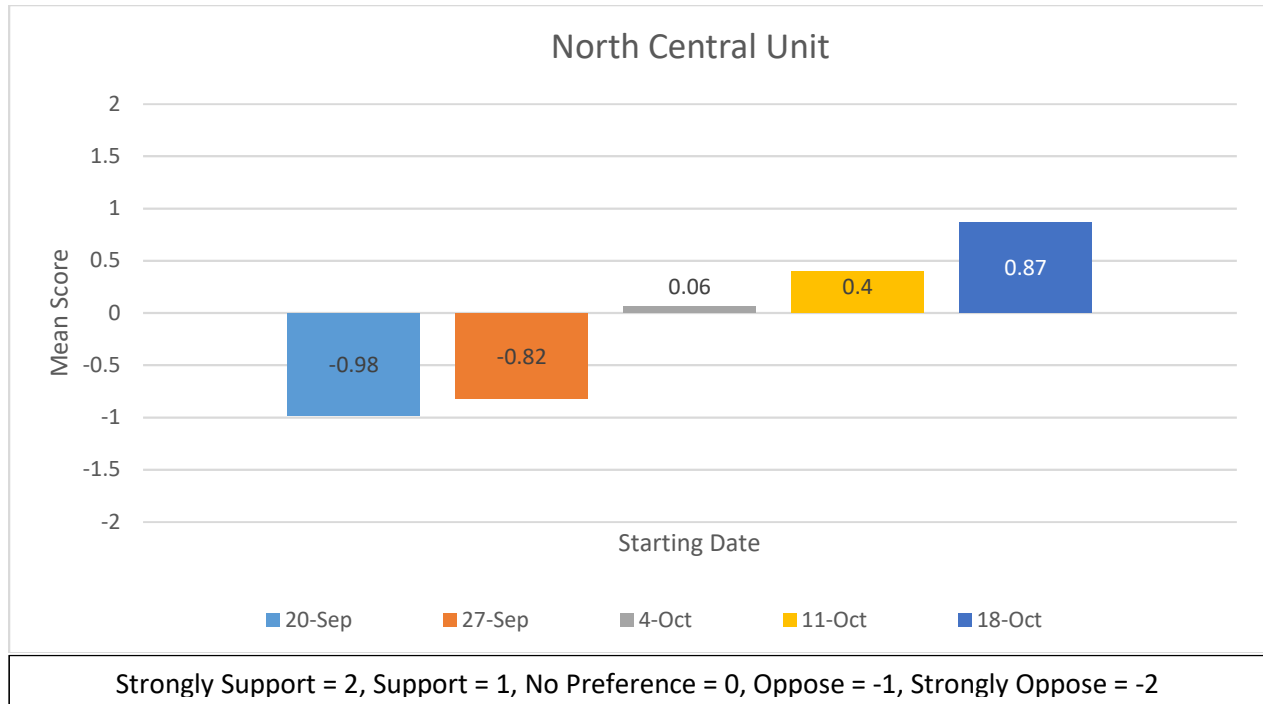


Figure 8. Overall respondent support and opposition ($n = 1,199$) to goose season dates for the new **Platte River** unit. Support and opposition were scored on a 5 point scale with -2 = strongly oppose and 2 = strongly support. Mean agreement scores for each set of season dates are also provided.

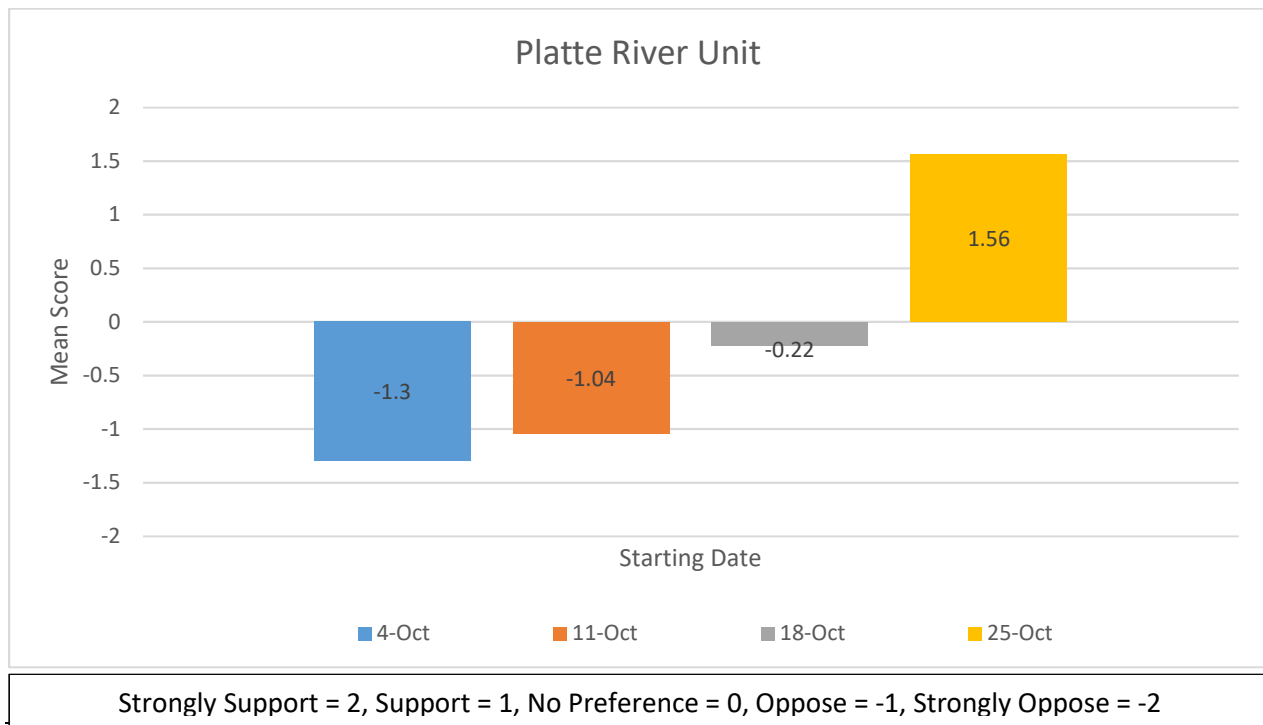


Table 21. Number and percentage ($n = 1,409$) of hunters preferring a 74-day season with a bag limit of 3 white-fronted geese, a 88-day season with a bag limit of 2 white-fronted geese, or a 105-day season with a bag limit of 1 white-fronted goose by residency.

Which bag limit do you prefer?	Overall	Resident	Non-resident
One (1)	211	182	29
	15.0%	14.7%	17.0%
Two (2)	622	550	72
	44.1%	44.4%	42.1%
Three (3)	576	506	70
	40.9%	40.9%	40.9%

Figure 9. Among all respondents who indicated that they preferred a 105-day white-fronted goose season with a bag limit of 1 goose ($n = 199$), the support of or opposition to particular season dates for the 2021-2022 season. Support and opposition were scored on a 5 point scale with -2 = strongly oppose and 2 = strongly support. Mean agreement scores for each set of season dates are also provided.

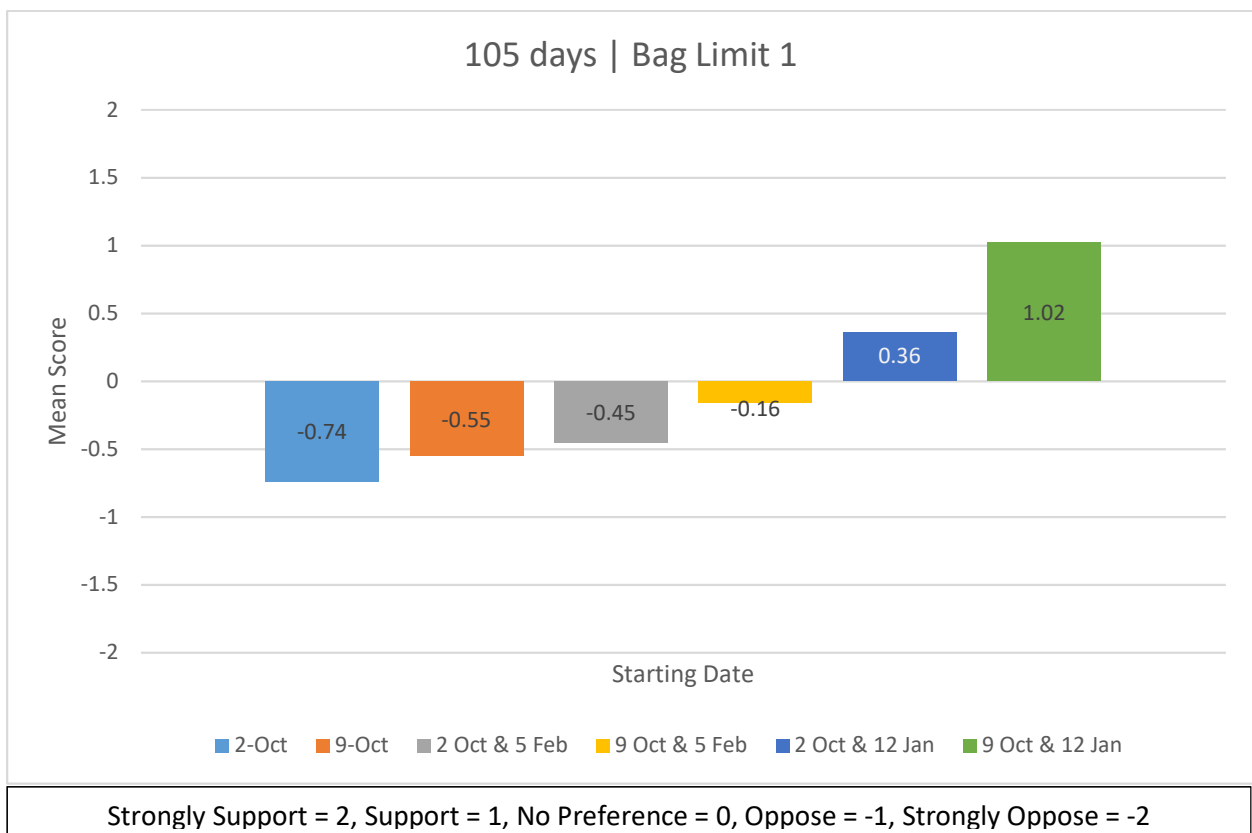
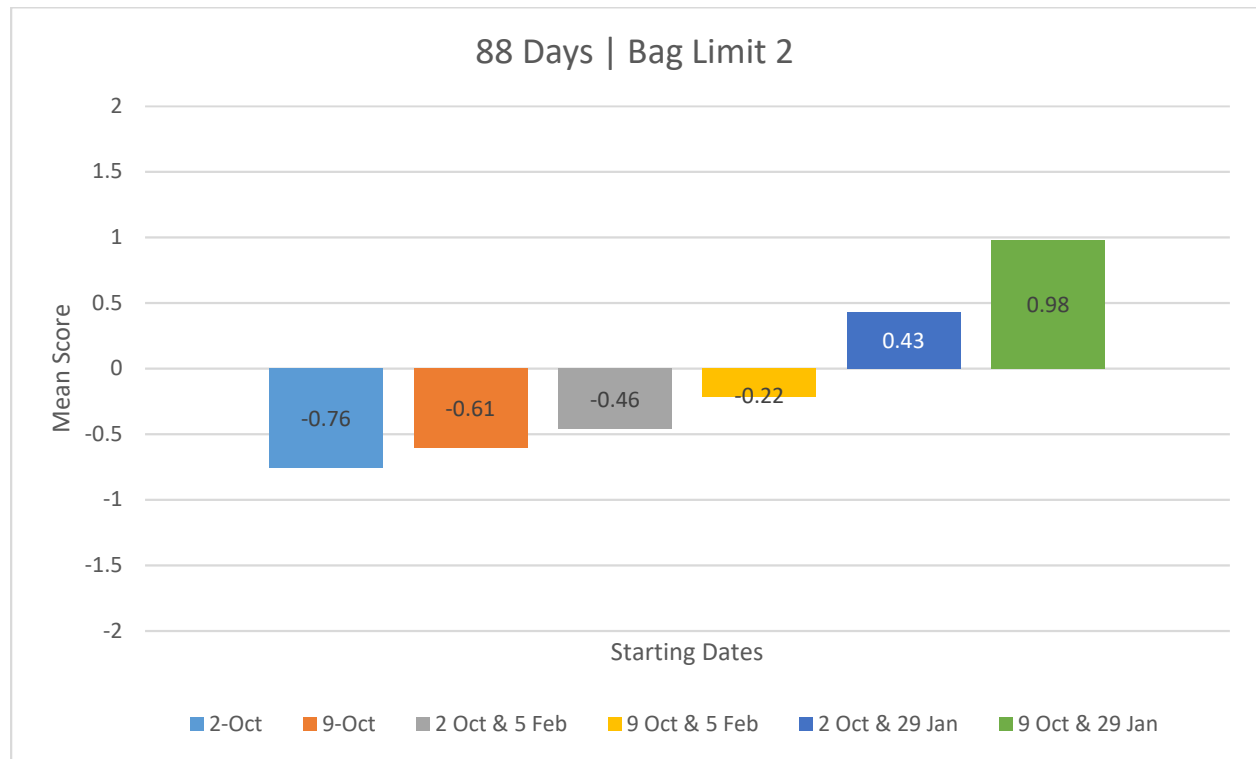
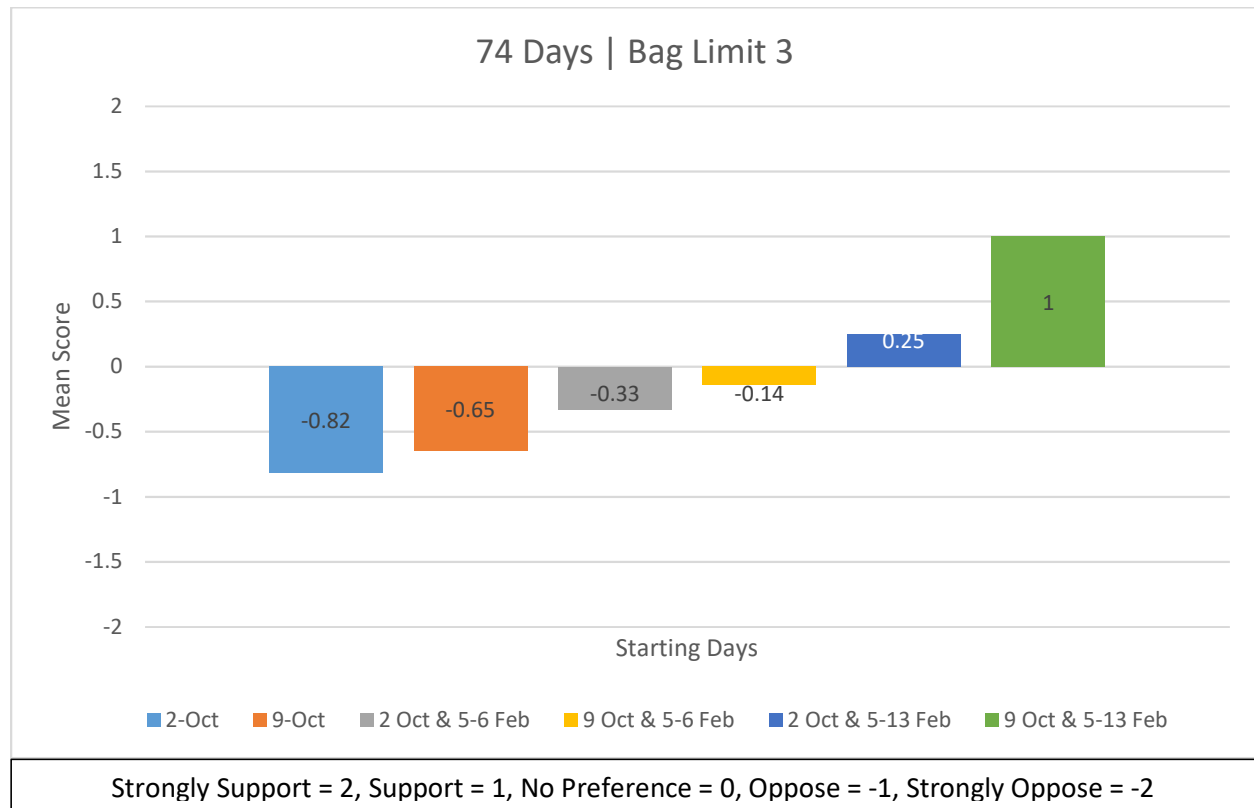


Figure 10. Among all respondents who indicated that they preferred an 88-day white-fronted goose season with a bag limit of 2 geese ($n = 584$), the support of or opposition to particular season dates for the 2021-2022 season. Support and opposition were scored on a 5 point scale with -2 = strongly oppose and 2 = strongly support. Mean agreement scores for each set of season dates are also provided.



Strongly Support = 2, Support = 1, No Preference = 0, Oppose = -1, Strongly Oppose = -2

Figure 11. Among all respondents who indicated that they preferred a 74-day white-fronted goose season with a bag limit of 3 geese ($n = 539$), the support of or opposition to particular season dates for the 2021-2022 season. Support and opposition were scored on a 5 point scale with -2 = strongly oppose and 2 = strongly support. Mean agreement scores for each set of season dates are also provided.



Appendix 1. Pre-2021 duck zone map.



Appendix 2. 2021-2022 duck zone map.

