2012 Duck Season Preference Survey
Final Report

Mark P. Vrtiska, Ph.D.
and
Heather Modrow
Nebraska Game and Parks Commission
Lincoln, Nebraska
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Executive Summary

A mail survey was conducted by the Nebraska Game and Parks Commission using the Harvest Information Program (HIP) database to assess hunter preferences for duck season dates and changes in duck zone format. From 10,276 surveys sent out, 2,932 (28%) individuals responded. Approximately 32% of respondents indicated they preferred a teal season opening for the weekend after Labor Day. Preference for youth waterfowl season was highest (32%) for the weekend preceding regular duck season for each zone. Fifty-nine percent of respondents were aware that Nebraska had adopted a new 4-zone format for ducks. Although a greater percentage of respondents indicated they preferred an opening day of Saturday, there was little difference between that and an opening day starting on Thursday for duck season. Approximately 50% of respondents indicated that the new 4-duck zone format would not change their satisfaction with their duck season. More respondents indicated it would increase their satisfaction than decrease it. Similar trends were evident in the expected number of days, ducks harvested, and places to hunt with the new 4-duck zone format. Preference for duck season dates in Zone 1 indicated a 20 October opening date. Respondents for zones 2 and 4 had preferences for an opening date of 13 October while respondents in Zone 3 had the latest preference with an opening date of 27 October. Results for preferences for opening dates were similar to dates selected in a survey conducted in 2008. Results from this study can be used to improve satisfaction with duck season dates by adjusting season dates to meet preferences. Future surveys need to refine preferences for duck season dates and acquire other information to better inform and improve satisfaction with duck hunting season dates.

INTRODUCTION

Matching expectations with reality appears to be an important aspect of duck hunting satisfaction (Brunke and Hunt 2007). Numerous factors, such as weather and habitat conditions, are beyond the control of management agencies in trying to match expectations and reality related to duck hunting. However, the setting of duck hunting season dates to occur during peak duck migration or hunting opportunities is a key factor in attempting to meet expectations with reality that is in control of management agencies. Although overall season length is important in providing the appropriate array of duck hunting season dates, two management strategies that have been used to assist with responding to season dates are split seasons and zoning (Baldassarre and Bolen 2006). Splits and zones allow for some manipulation of duck season dates to more closely match dates with duck migration or hunting opportunities (Baldassarre and Bolen 2006).

Nebraska was one of the first states to employ zoning as a means to satisfy preferences for duck hunting season dates and had maintained a two-zone, two split-format, with the High Plains portion of Nebraska being a separate zone, since 1991. Starting in the 2012/13 hunting season, the duck zone format was changed to 4-zones with no splits. Additionally, the High Plains portion of Nebraska was zoned for the first time (Fig 1). Zone configurations are based on differing habitat types found within Nebraska that generally consist of relatively shallow habitats that offer hunting opportunity earlier in the fall prior to freeze-up, and rivers, larger lakes and reservoirs and habitats that remain open after most other areas have frozen up. The differences in habitats then provide general differences in ducks harvested, with species like blue- and green-winged teal, gadwall, American wigeon, northern pintail, wood ducks using shallower habitats, and the later freezing habitats providing more hunting opportunity for mallards.

Although zoning probably has increased the probability of matching expectations and reality of duck season dates with the appropriate habitat areas, there remains some contentiousness among duck hunters within zones about specific season dates and hunting opportunity. Additionally, previous survey information acquired in 2008 indicated that hunters wanting later duck hunting season dates (Nebraska Game and Parks Commission [NGPC], unpublished data).

Thus, NGPC conducted a mail survey of Nebraska duck hunters with the objectives of: 1) identifying season date preferences among Nebraska duck hunters for duck seasons in each of the four new zones; and 2) obtain additional information on season date preference which may be used as to begin to possibly adaptively manage duck season dates and hunter satisfaction or recruitment and retention.

METHODS

We obtained a list of all hunters who registered with the 2010-11 Harvest Information Program (HIP) and had indicated they hunted ducks the previous

year. We mailed surveys to each hunter on the list for which a useable name and address and attempted to send only one survey to a particular household.

NGPC staff constructed a 4-page survey form to ask selected individuals their preferences for season dates regarding teal, youth waterfowl and regular duck seasons in all four zones (Appendix A). Additionally, the survey asked individuals questions regarding changes to the new duck zone format (Appendix A). Due to the change in the duck zone regulations, splits (i.e., closed period) during the duck season were no longer available. The survey asked individuals as to what day they would prefer for an opening day for the 74 day (liberal) duck season and how the new zoning would affect their satisfaction and hunting strategy during the duck season. The survey also included maps of zones and a calendar of October-January for reference (Appendix A). Individuals were not mailed a postcard reminder and no attempt was made to gauge non-response bias.

For questions regarding teal, youth waterfowl, awareness of new 4-zone format and preference for opening day, results were compiled as percent responding to choices on survey. For season date preferences for each duck zone, mean scores were generated by averaging the scores of responses with scores of 1.0 for “strongly opposed” to 5.0 for “strongly support”.

RESULTS

Ten thousand two hundred seventy nine individuals met the qualifying criteria and were mailed surveys. Three surveys were returned for an effective mailing of 10,276. Response rate was 28% (*n* = 2,932).

Teal Season Opener

Among respondents, 32% preferred an opening date for the teal season of the first weekend after Labor Day (Fig 2). Preference for opening teal dates on September 1st-16th was selected by 21% of respondents (Fig 2). Thirty-five percent of respondents indicated it does not matter what the opening date for teal would be (Fig 2).

Youth Waterfowl Opener

Overall, 32% indicated a preference for the weekend preceding the regular duck season of the corresponding zone for the youth waterfowl opener (Fig 3). However, 41% of the respondents indicated that it does not matter when the youth waterfowl season occurs (Fig 3).

Duck Zone Change

Respondents indicated that 59% were not aware that the NGPC had adopted a new duck zone format while 41% were aware of the change (Fig 4).

Respondents to the survey were somewhat evenly dispersed on a preference as to when to start and end duck season (Fig 5). A slightly higher number (29%) of respondents indicated a preference for a Saturday start and ending on a Tuesday as compared to those (27%) indicating a preference for a Thursday start and ending on a Sunday. Twenty-two percent preferred the season to start on the same date each year and 21% had no preference (Fig 5).

At least 50% of respondents indicated their satisfaction would remain the same despite the change in duck zone format (Fig 6). Over 20% of respondents indicated that their satisfaction would increase somewhat or greatly compared to <10% indicating it would decrease (Fig 6). Similar trends were noted in duck hunting activities with the majority of individuals having no change in their habits and slightly more individuals would increase their number of days and places hunted and increase in duck harvest than decreasing those same factors (Fig 7).

Season Date Preferences

Zone 1 – This zone had previously been part of the Low Plains Late zone. Recent season dates had been a mid-October opening date with an early January closing date (Table 1b). Season dates preferences among duck hunters in Zone 1 favored opening dates that started later into October (Fig 8). Respondents' highest preference was for a 20 October – 1 January season (Fig. 8). The second most popular season date preference was for 13 October – 25 December. More respondents indicated a preference for a later (27 October – 8 January) duck season than earlier (Fig. 8).

Zone 2 – This zone was previously considered as part of the Low Plains Early and High Plains zones. Recent season dates were late September and early October but were approximately one week later in 2008, 2009, and 2011 in the Low Plain Early zone (Tables 1b and 1c). Season date preferences for Zone 2 were for 13 October – 25 December with additional hunting dates of 26 December – 17 January (Fig. 9). The second most preferred set of dates was for 6 October – 18 December, with additional hunting dates of 19 December - 10 January (Fig. 9). There was a higher preference for season dates of 20 October – January 1 than for 29 September – 11 December (Fig 9).

Zone 3 – Similar to Zone 2, Zone 3 was previously contained in two different zone boundaries. The portion of Zone 3 in the Low Plains was previously considered the Low Plains Late Zone and had recent season dates of mid-October to early January (Table 1a). In the High Plains portion, Zone 3 had early October opening dates and closed in mid-January (Table 1c). Splits in the season had occurred until 2008 when the season ran concurrently (Table 1c). Compared to other zones, duck hunters in this zone favored the latest duck season dates. Respondents indicated a preference for a 27 October – 8 January duck season, with additional hunting days of 9 – 27 January (Fig. 10). The second most popular selection was for an October 20th start with a January 1st

end with additional hunting days of 2 -24 January (Fig 10). Duck hunting season dates beginning in late September or early October were least favored (Fig 10).

Zone 4 – This zone was previously in the southern portion of the Low Plains Early Zone and had late September or early October opening dates (Table 1b). For this zone, respondents indicated a preference for duck season dates of 13 October – 25 December (Fig 11). Season dates for 6 October – 18 December was the second most popular, whereas late October into November were least favored by the respondents (Fig. 11).

DISCUSSION

This survey was the first opportunity to obtain preference information for September teal and youth waterfowl season dates. Preference for an opening day after Labor Day weekend may be due to other activities individuals may be engaged and prefer a later weekend. Also, there may be a perception of more teal in a slightly later opening weekend. Including a choice for a consistent opener of 1-16 September in the teal question represented a "double-barreled" choice and made it difficult to interpret (Weisberg et al. 1996). Nonetheless, this choice still was a distant second in preference to the weekend after Labor Day weekend.

For youth waterfowl season, previous input received by duck hunters indicated a preference for having youth waterfowl weekend just prior to regular duck season (M. Vrtiska, NGPC, personal observation). Most duck hunters had indicated they also use that weekend also to prepare for the regular duck season opener.

Preferences for duck season dates were similar to results obtained in 2008 (NGPC, unpublished data). Duck hunters generally preferred season dates later than they had experienced. Differences in season date preferences among zones were anticipated given differences in habitats and migration chronology by duck species. However, the trend toward later season dates in some zones was not anticipated and somewhat perplexing given recent history and potential duck harvest based on past harvest information. For example, in the set of season dates options for Zone 2, potential duck harvest declines rapidly (particularly in the Sandhills portion of Zone 2) as season dates open and close later (Nebraska Game and Parks Commission, unpublished data). Unfortunately, our survey did not contain questions regarding the motives behind preferences of some duck season date options over others.

The slight changes in satisfaction and duck habits were anticipated given that zone changes probably affect relatively few hunters given changes primarily affect those close to boundary lines where changes were made. Changes made to the new format would appear to more positively affect more duck hunters. Additionally, 42% of duck hunters in Nebraska hunt 10 days or less (National Flyway Council and Wildlife Management Institute 2006). Thus, these individuals

could be considered less avid and probably are less likely to take advantage of zone changes.

MANAGEMENT IMPLICATIONS AND FUTURE INFORMATIONAL NEEDS

Teal and youth waterfowl seasons should be adjusted to meet duck hunter preferences. The preference for later duck seasons among Nebraska duck hunters indicate that duck seasons should be adjusted to later opening dates to meet preferences of most Nebraska duck hunters. However, adjustments to season dates need to consider other factors (e.g., duck migration chronology) rather than simply relying on results of this survey alone. Also, similar surveys may be needed if duck season lengths are reduced commensurate with reduced duck populations.

Continuation of this type of survey (i.e., season date preferences) could lead to implementation of an adaptive management means of setting annual duck season regulations. An annual monitoring survey may already be in place (i.e., Hunter Success Survey) to measure different metrics about duck hunting. However, currently, NGPC does not have an explicitly stated goal about duck harvest opportunity. An explicitly stated goal is essential in the adaptive management process (Walters 1986) and would have major impacts on setting duck season dates. For example, if the goal is to maximize mallard harvest, then season dates in all zones need to coincide with peak mallard migration, which may be considerably different than if the goal is to recruit new participants in duck hunting (NGPC 2008). Therefore, while season date surveys will be extremely informative for setting duck seasons, using that information in an adaptive management process will be limited.

Whether an agreement on a duck hunting opportunity could be reached across the state or within current duck zones is unknown. However, future survey efforts should focus on addressing this issue if an adaptive management process is desired.

ACKNOWLEDGEMENTS

We thank T. Rohrs for assistance with design, distribution and implementation of the survey. A. Hain and P. Barnes assisted with distribution of the survey. K. Smith assisted with data entry and analyzing preliminary results. Finally, we thank the duck hunters that responded to the survey and their continued support of the waterfowl resource in Nebraska.

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Table 1a. Nebraska duck season dates for the Low Plains Late Zone from 1999-2011.

Year	Opening Date	Closing Date	Opening Date	Closing Date
1999	Sat., Oct. 9	Sun., Dec. 19	Sat., Dec. 25	Sun., Dec. 26
2000	Sat., Oct. 14	Sun., Oct. 15	Sat., Oct. 21	Sun., Dec. 31
2001	Sat., Oct. 13	Sun., Oct. 14	Sat., Oct. 20	Sun., Dec. 30
2002	Sat., Oct. 12	Sun., Oct. 13	Sat., Oct. 19	Sun., Dec. 29
2003	Sat., Oct. 18	Sun., Oct. 19	Sat., Oct. 25	Sun., Jan. 4, 2004
2004	Sat., Oct. 16	Sun., Oct. 17	Sat., Oct. 23	Sun., Jan. 2, 2005
2005	Sat., Oct. 15	Sun., Oct. 16	Sat., Oct. 22	Sun., Jan. 1, 2006
2006	Sat., Oct. 21	Sun., Oct. 22	Sat., Oct. 27	Sun., Jan. 7, 2007
2007	Sat., Oct. 20	Tues., Jan. 1, 2008	---	---
2008	Sat., Oct. 18	Sun., Oct. 19	Sat., Oct. 25	Sun., Jan. 4, 2009
2009	Sat., Oct. 17	Sun., Oct. 18	Sat., Oct. 24	Sun., Jan. 3, 2010
2010	Sat., Oct. 16	Sun., Oct. 17	Sat., Oct. 23	Sun., Jan. 2, 2011
2011	Sat., Oct. 15	Sun., Oct. 16	Sat., Oct. 22	Sun., Jan. 1, 2012

Table 1b. Nebraska duck season dates for the Low Plains Early Zone from 1999-2011.

Year	Opening Date	Closing Date	Opening Date	Closing Date
1999	Sat., Oct. 2	Sun., Dec. 12	Sat., Dec. 18	Sun., Dec. 19
2000	Sat., Sept. 30	Sun., Dec. 10	Sat., Dec. 16	Sun., Dec. 17
2001	Sat., Sept. 29	Sun., Dec. 9	Sat., Dec. 15	Sun., Dec. 16
2002	Sat., Sept. 28	Sun., Oct. 6	Sat., Oct. 12	Sun., Dec. 15
2003	Sat., Oct. 4	Sun., Dec. 14	Sat., Dec. 20	Sun., Dec. 21
2004	Sat., Oct. 2	Sun., Dec. 12	Sat., Dec. 18	Sun., Dec. 19
2005	Sat., Oct. 1	Sun., Dec. 11	Sat., Dec. 17	Sun., Dec. 18
2006	Sat., Oct. 7	Sun., Dec. 17	Sat., Dec. 23	Sun., Dec. 24
2007	Sat., Oct. 6	Sun., Dec. 16	Sat., Dec. 22	Sun., Dec. 23
2008	Sat., Oct. 11	Sun., Dec. 21	Sat., Dec. 27	Sun., Dec. 28
2009	Sat., Oct. 10	Sun., Dec. 20	Sat., Dec. 26	Sun., Dec. 27
2010	Sat., Oct. 2	Sun., Dec. 12	Sat., Dec. 18	Sun., Dec. 19
2011	Sat., Oct. 8	Sun., Dec. 18	Fri., Dec. 23	Sat., Dec. 24

Table 1c. Nebraska duck season dates for the High Plains Zone from 1999-2011.

Year	Opening Date	Closing Date	Opening Date	Closing Date
1999	Sat., Oct. 2	Mon., Dec. 13	Sat., Dec. 17	Sun., Jan. 9, 2000
2000	Sat., Sept. 30	Sun., Dec. 10	Fri., Dec. 15	Sun., Jan. 7, 2001
2001	Sat., Sept. 29	Sun., Dec. 9	Fri., Dec. 14	Sun., Jan. 6, 2002
2002	Sat., Sept. 28	Sun., Dec. 8	Fri., Dec. 13	Sun., Jan. 5, 2003
2003	Sat., Oct. 4	Sun., Dec. 14	Sat., Dec. 20	Mon., Jan. 12, 2004
2004	Sat., Oct. 2	Sun., Dec. 12	Sat., Dec. 18	Mon., Jan. 10, 2005
2005	Sat., Oct. 1	Sun., Dec. 11	Sat., Dec. 17	Mon., Jan. 9, 2006
2006	Sat., Oct. 7	Sun., Dec. 17	Sat., Dec. 23	Mon., Jan. 15, 2007
2007	Sat., Oct. 6	Sun., Dec. 16	Sat., Dec. 22	Mon., Jan. 14, 2008
2008	Sat., Oct. 11	Wed., Jan. 14, 2009	---	---
2009	Sat., Oct. 10	Wed., Jan. 13, 2010	---	---
2010	Sat., Oct. 9	Wed., Jan. 12, 2011	---	---
2011	Sat., Oct. 8	Wed., Jan. 11, 2012	---	---

Figure 1. Duck zone configuration for Nebraska beginning in the 2012/13 hunting season.

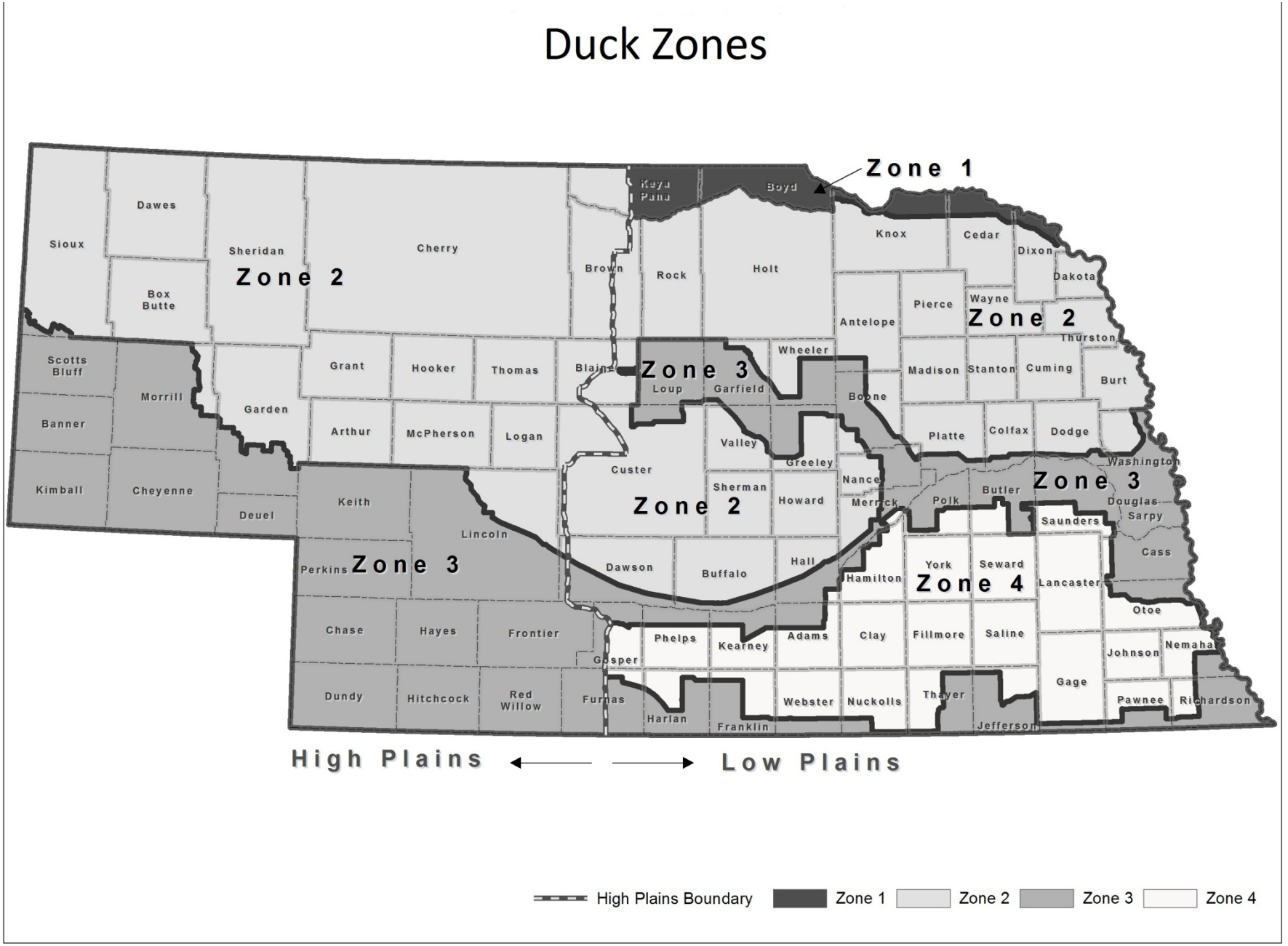

Figure 2. Percent of respondents (n = 2,911) to a mail survey question regarding their preferences for potential opening dates for the September teal season in Nebraska for the 2012/13 hunting season.

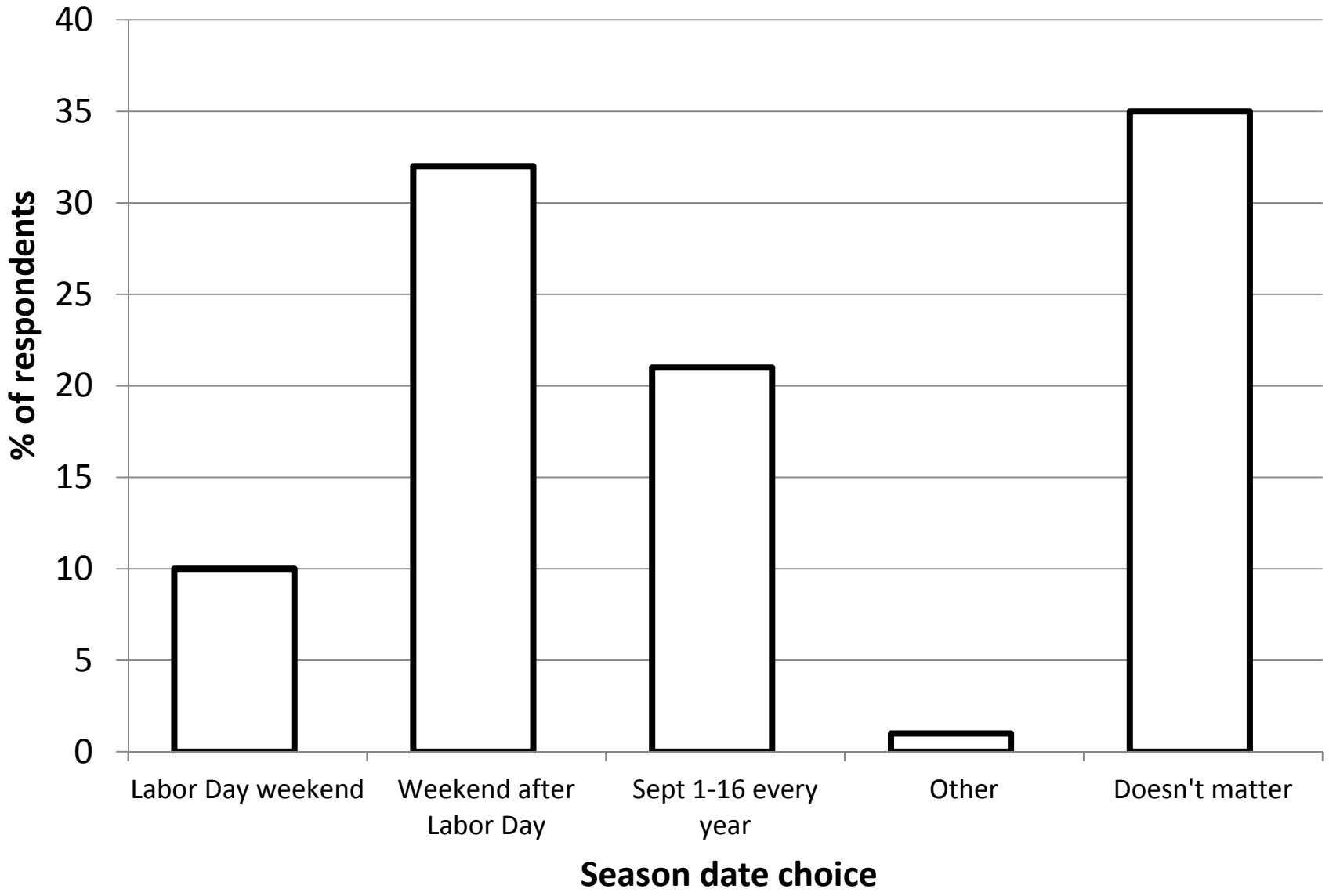

Figure 3. Percent of respondents (n = 2,915) to a mail survey question regarding their preferences for season dates for youth waterfowl season in Nebraska for the 2012/13 hunting season.

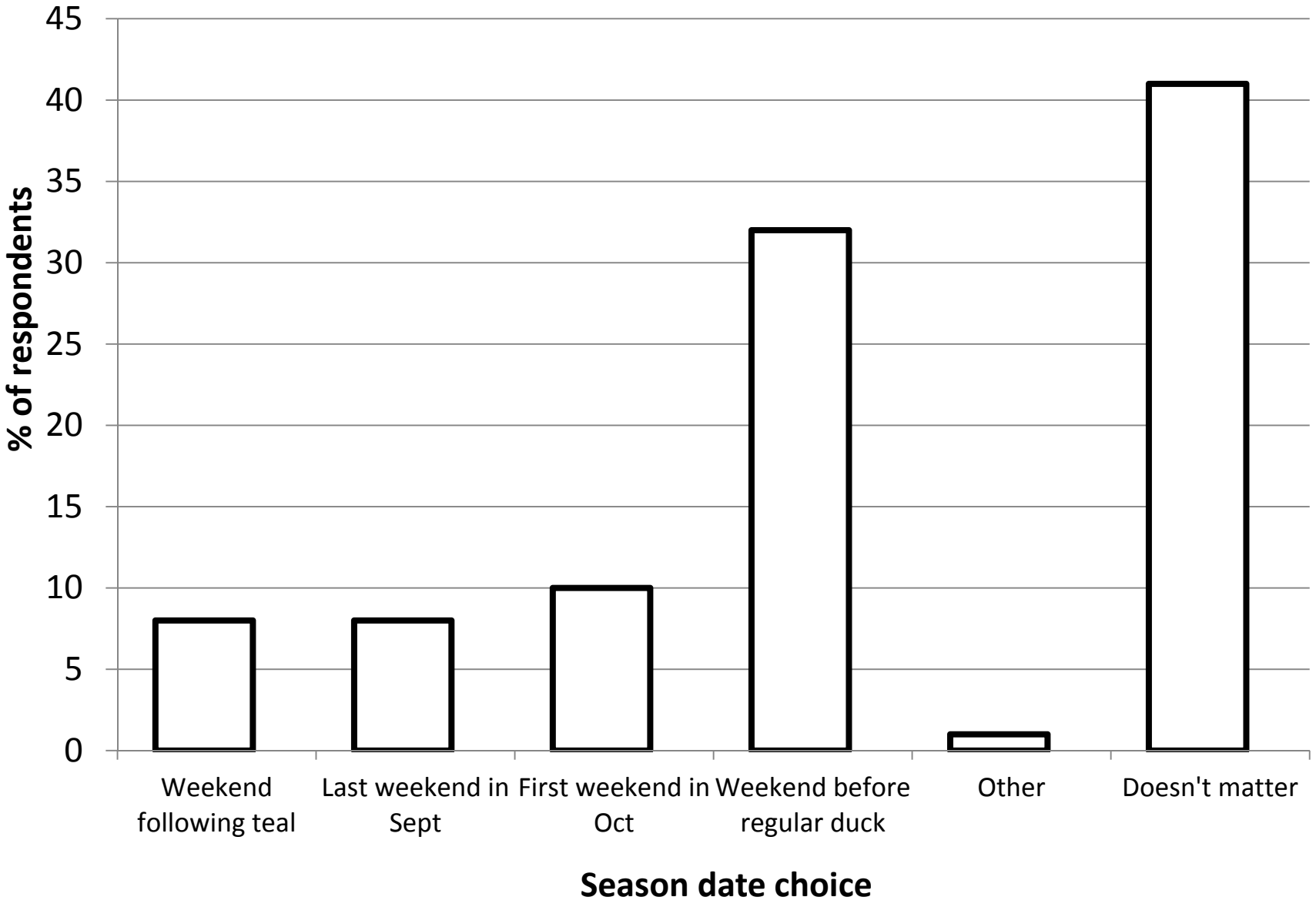

Figure 4. Percent of respondents (n = 1,172) to a mail survey question asking individuals if they were aware of a change to a new 4-zone format for duck hunting in Nebraska beginning in the 2012/13 hunting season.

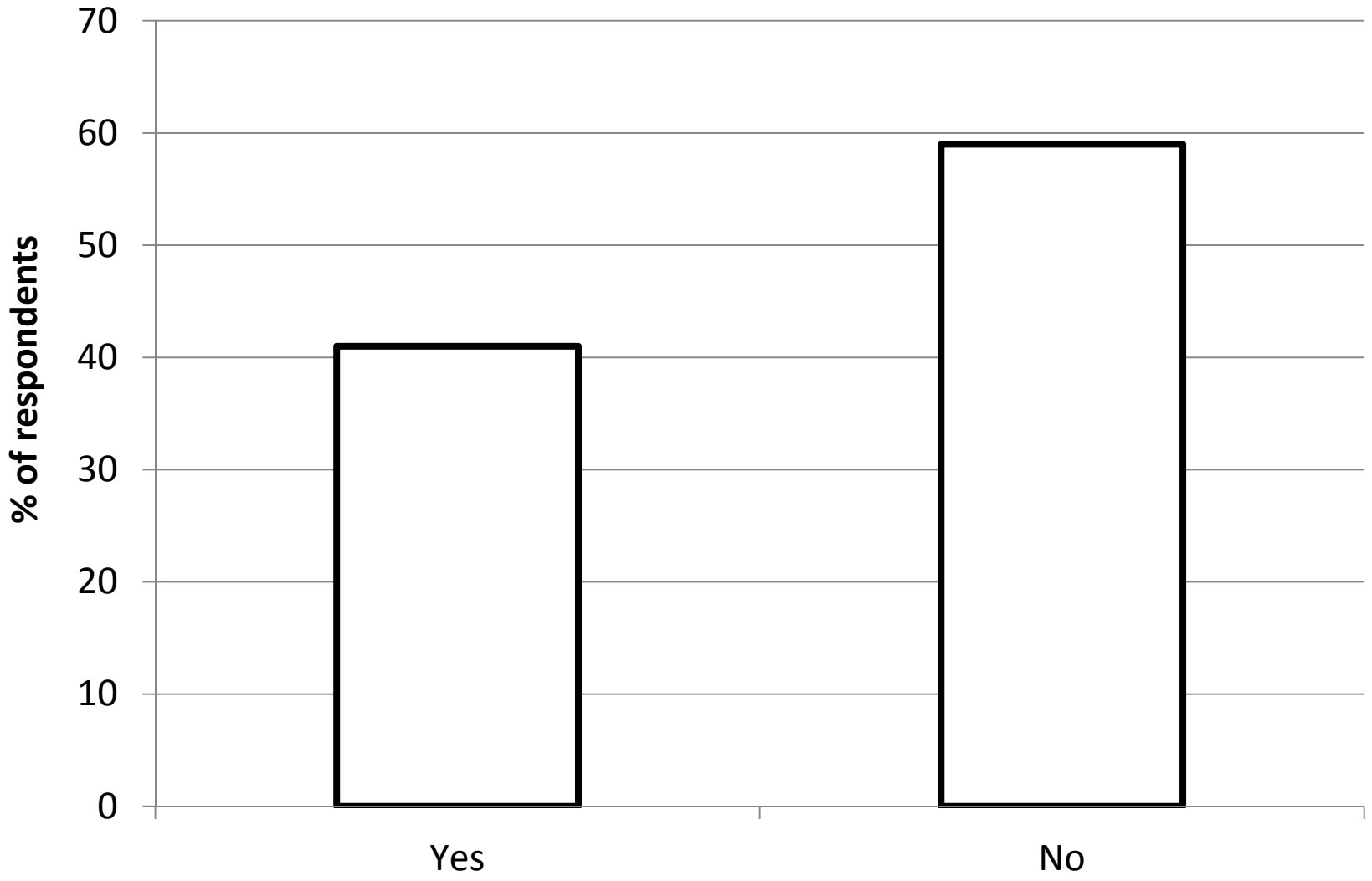

Figure 5. Percent of respondents (n = 2,911) to a mail survey question asking individuals their preference for an opening and closing day for duck seasons in Nebraska for the 2012/13 hunting season.

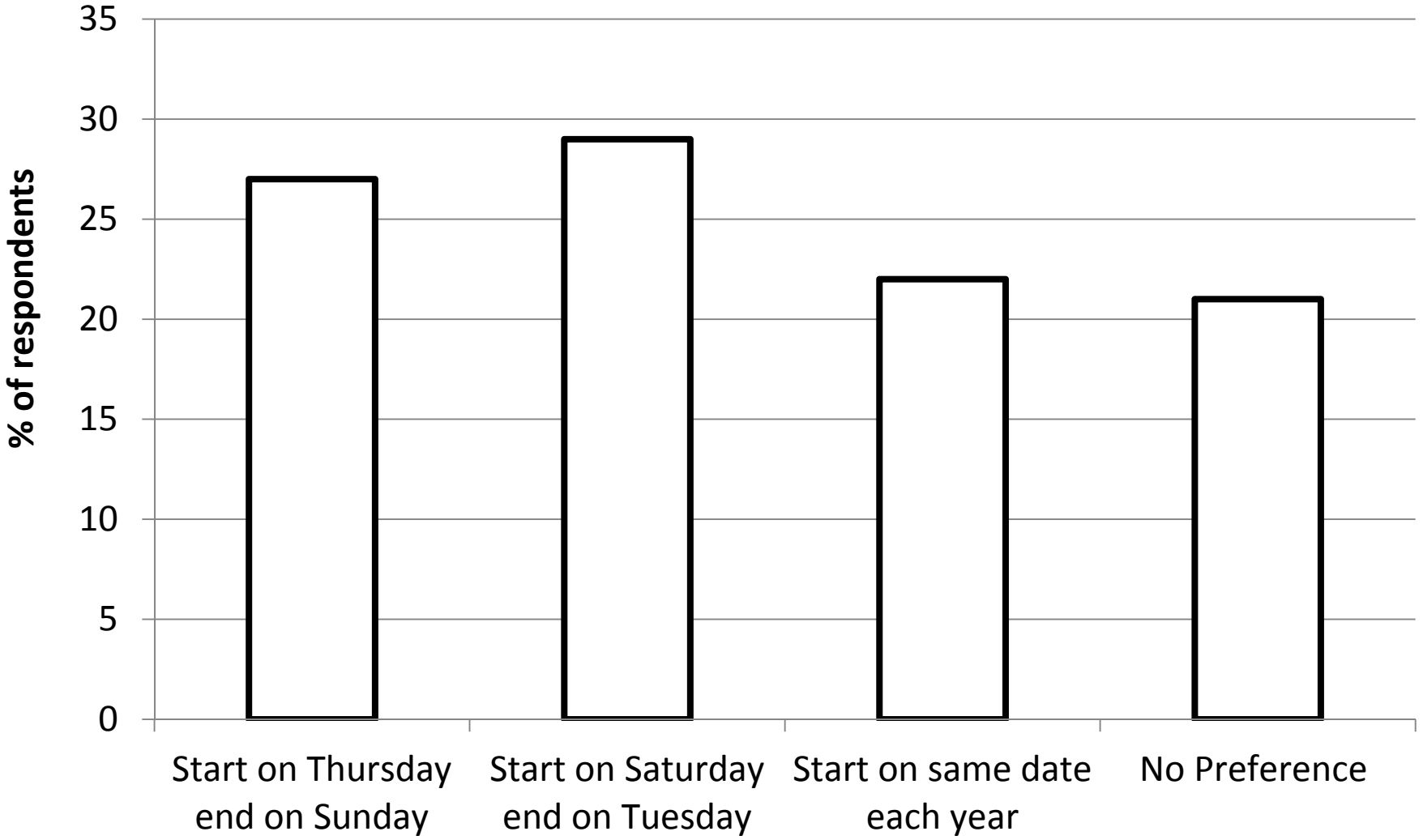

Figure 6. Percent of respondents (n = 2,872) to a mail survey question asking individuals how their duck hunting season satisfaction would be affected with the new 4-zone format for duck hunting in Nebraska.

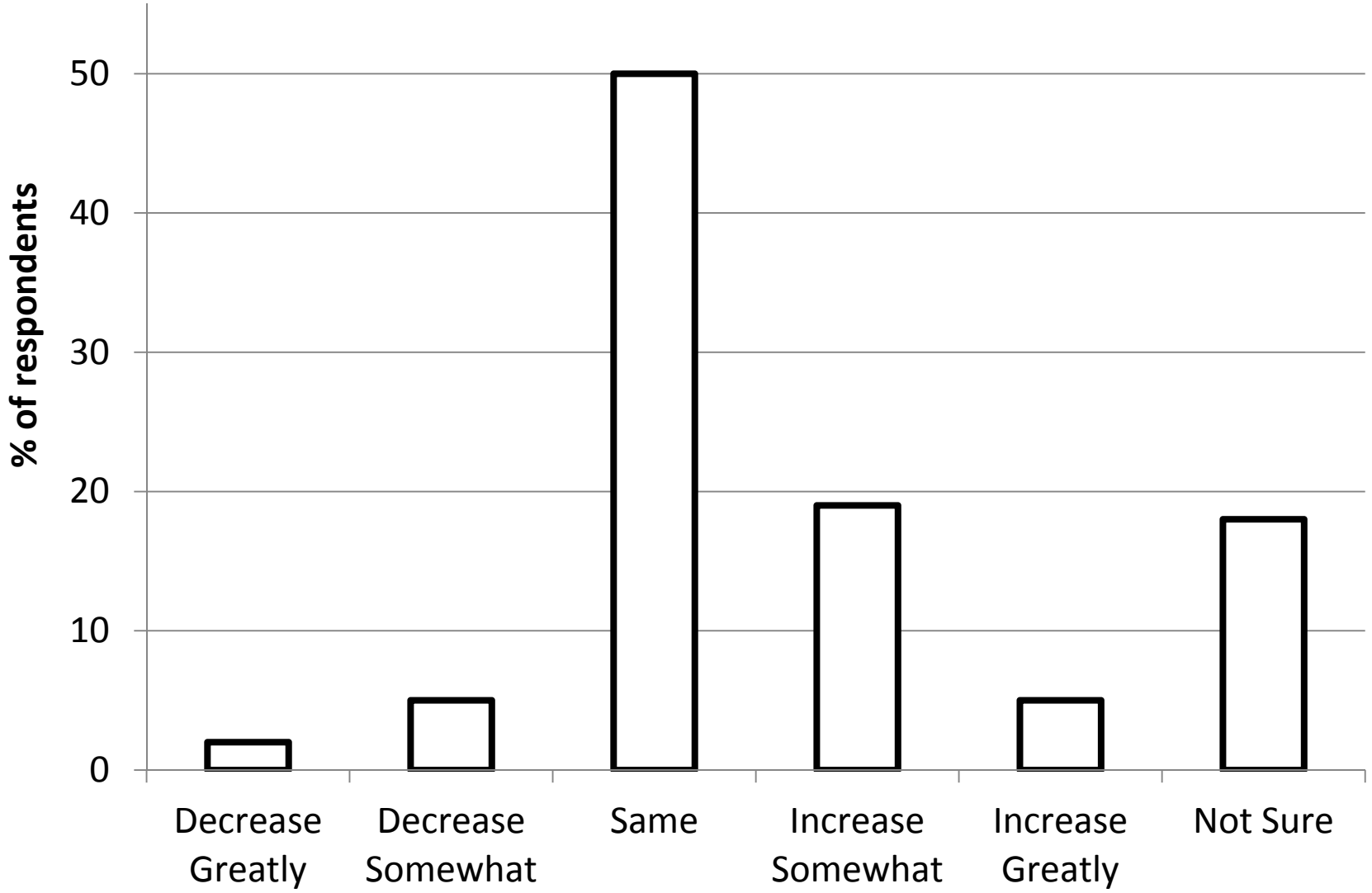

Figure 7. Percent of respondents (n = 2,872) indicating their level of change in regards to the number of hunting days, ducks harvested, or the number of places hunted with the change to the new 4-zone format for duck hunting in Nebraska.

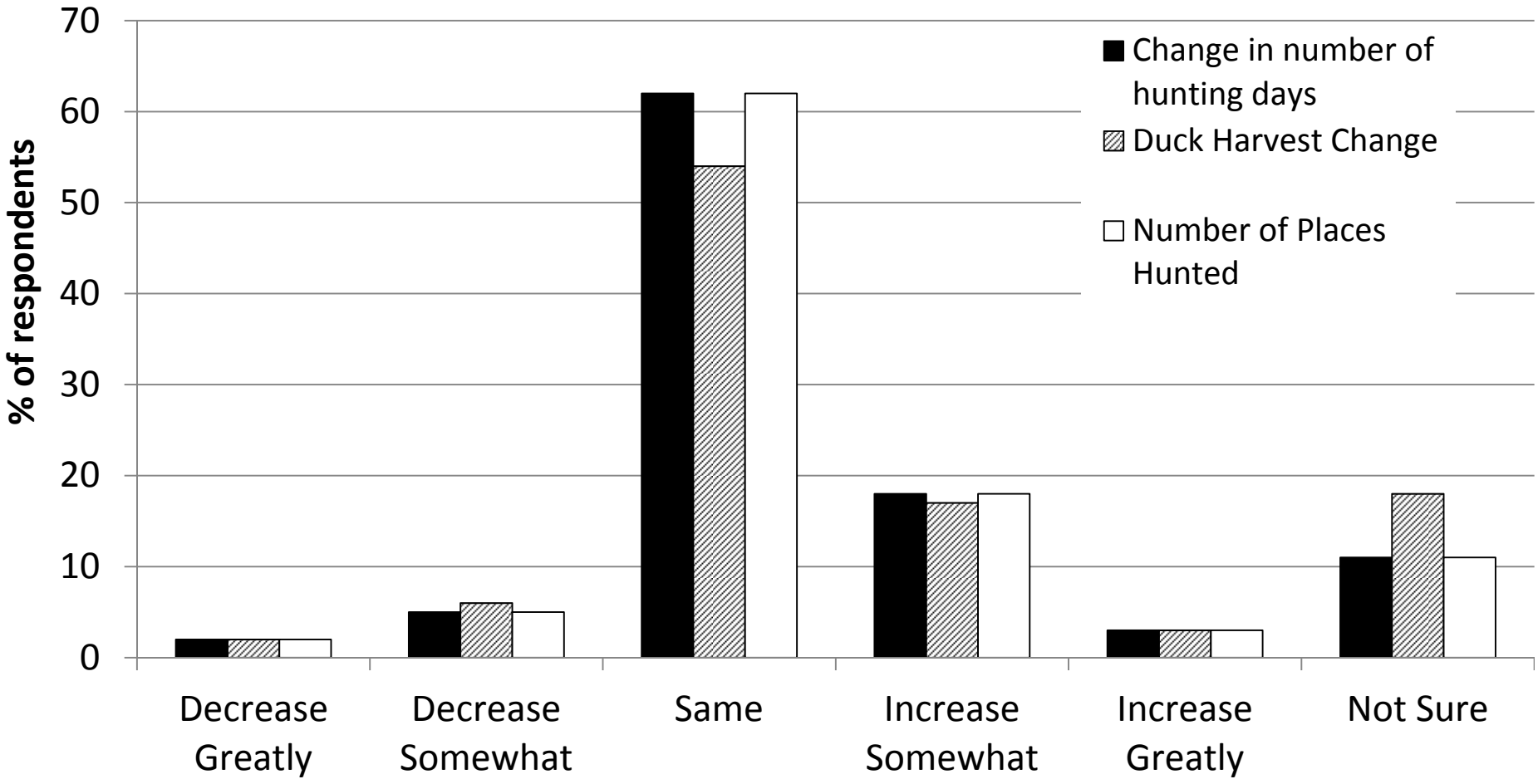

Figure 8. Mean scores of respondents (n = 676) for preferences for duck hunting season dates for Zone 1 in Nebraska.

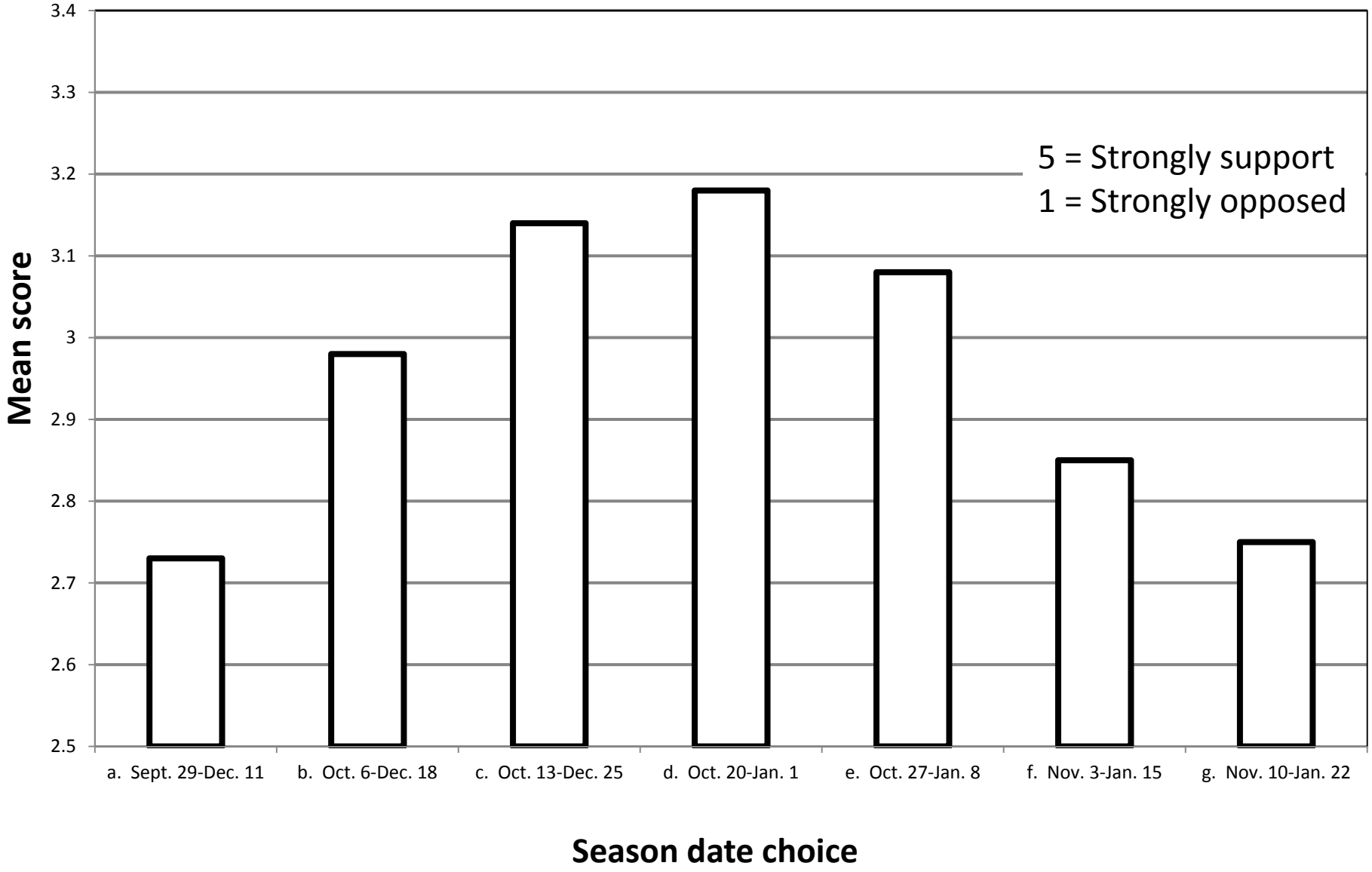

Figure 9. Mean scores of respondents (n = 1,249) for preferences for duck hunting season dates for Zone 2 in Nebraska.

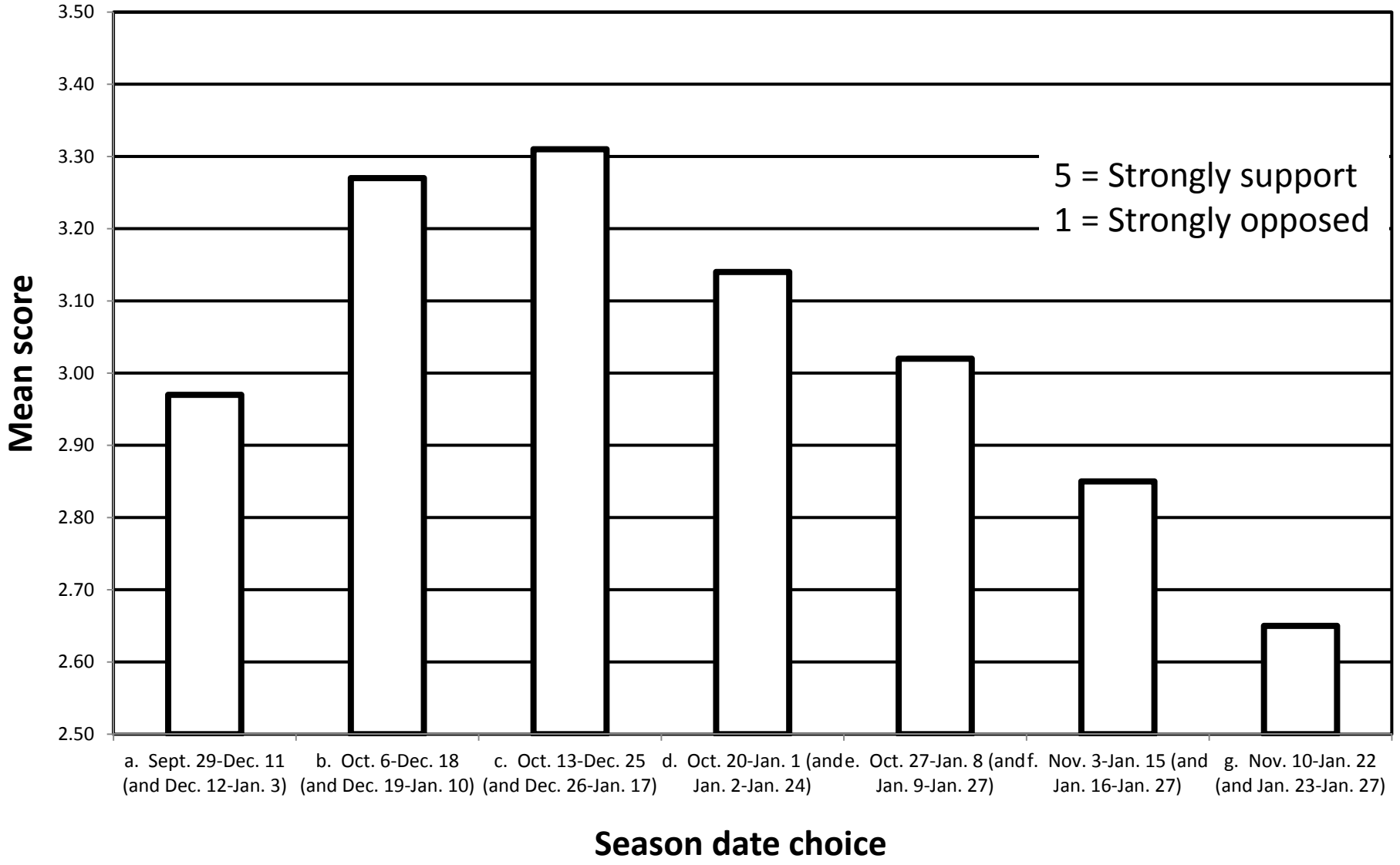

Figure 10. Mean scores of respondents (n = 1,841) for preferences for duck hunting season dates for Zone 3 in Nebraska.

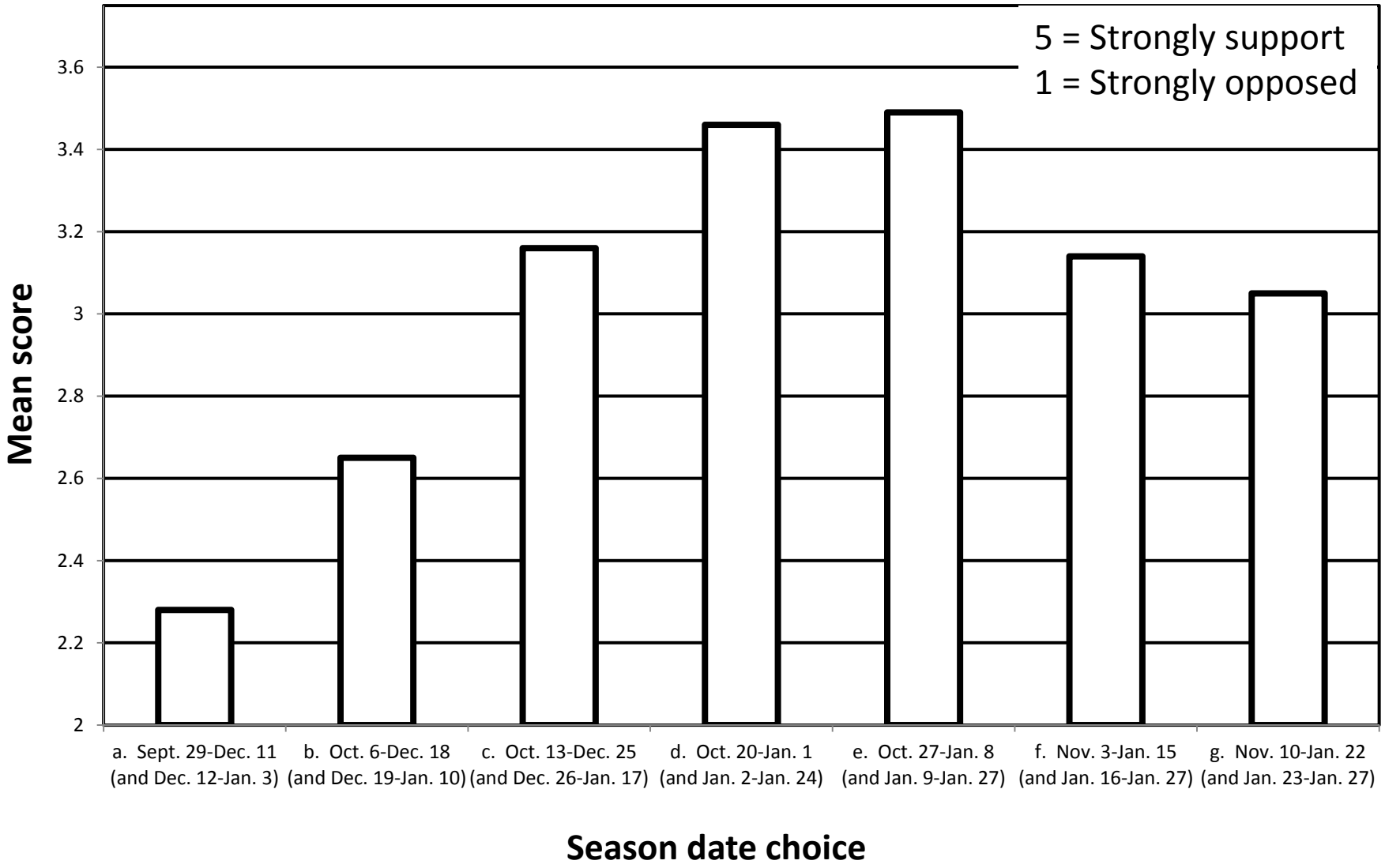

Figure 11. Mean scores of respondents (n = 1,172) for preferences for duck hunting season dates for Zone 4 in Nebraska.