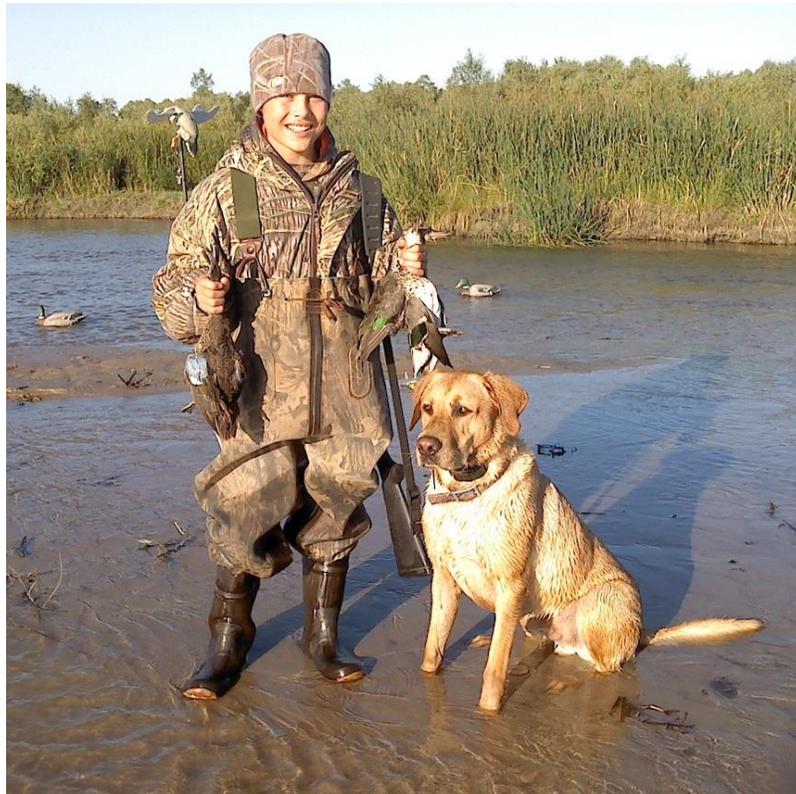


2017 September Teal Season Date Preference Survey



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Nebraska Game and Parks Commission
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Introduction

Blue-winged teal (hereinafter blue-wings) are the earliest dabbling ducks to begin fall migration, beginning in August with most blue-wings arriving on wintering grounds in October (Rohwer et al. 2002). Because most blue-wings are not typically available to harvest during regular duck seasons, September teal seasons were established to provide hunting opportunity on blue-wings, but also green-winged and cinnamon teal.

Although setting appropriate season dates for September teal seasons may not be as difficult as regular duck season given the limited time frame in which to set them (i.e., 1-30 September), a season length (16 days) that encompasses approximately half that time frame, no competing or interaction duck migration chronologies (e.g., mallards vs. other dabbling ducks), and fewer participants. Nonetheless, setting appropriate season dates is important to match expectations with reality as it 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 with hunter preferences are key factors in attempting to meet expectations with reality that is in control of management agencies.

Thus, the Nebraska Game and Parks Commission (NGPC) conducted a mail survey of Nebraska September teal hunters with the objectives of identifying season date preferences among teal hunters for teal season dates for both the Low and High Plains portions of Nebraska, and obtain additional information on property ownership and where teal hunting activity occurs.

Methods

Names and mailing and email addresses were obtained from the 2016 Nebraska Harvest Information Program (HIP) database. We selected only those individuals registering for HIP on or before 24 September, 2016, to primarily target individuals that may have participated in the 2016 September teal season and were more likely to be teal hunters. We only selected Nebraska resident hunters to be surveyed and hunters that indicated they had hunted ducks during the previous season in HIP.

Those selected were then separated into two groups, those with email addresses and those without. SNAP software was used to send an electronic survey to those individuals with email addresses asking them about their participation, season date preferences, and where they hunted teal (Fig. 1). Three subsequent reminder emails were sent to non-respondents, approximately one week apart. Respondents were only allowed to take the survey once. Those without email addresses were mailed a similar survey (Fig. 1). Mailing addresses were checked for accuracy prior to distribution but no reminder or reminder survey was sent to non-respondents in the mail survey.



Nebraska Game and Parks Commission

2017 TEAL SURVEY

Dear Nebraska Teal Hunter:

To better understand teal season date preferences, please take a few minutes to respond to this questionnaire. Your information is important to us and will be kept confidential. *Thank you in advance for your participation.*

1. Did you hunt in any of the last 4 September teal seasons? (*Check one box*)

- Yes
- No.

2. Indicate your preference for the opening day of September teal season.

(*Check one box*)

- Labor Day weekend.
- First weekend *after* Labor Day weekend.
- Other. Please Specify _____.
- Does not matter to me.

3. Which zone did you do most of your teal hunting? (*Check one box*)

See map on back.

- Low Plains Zone.
- High Plains Zone.
- Both Low and High Plains Zones equally.
- Not sure.

4. Please indicate where you do most of your teal hunting. (*check one box*)

- Private, land owned by me or family.
- Private, permission for access obtained from landowner.
- Private, daily or seasonal fee or lease.
- Public area, land owned or leased by Nebraska Game and Parks Commission or U.S. Fish and Wildlife Service (e.g., National Wildlife Refuge, Waterfowl Production areas), or walk-in access program.
- Public area, land owned or leased by agency other than Nebraska Game and Parks Commission or U.S. Fish and Wildlife Service (e.g., NRD).

Figure 1. Survey sent to a subsample of Nebraska Harvest Information Program registrants to determine participation, season date preferences, and where (if) they had hunted during September teal seasons.

Results

A total of 2,763 HIP registrants were given an email survey, and another 2,768 surveys were mailed to HIP registrants who did not provide email addresses. With the reminder emails, 7,106 total emails of the survey were sent out over the course of 4 weeks to the same 2,763 hunters surveyed via email. Ninety eight emails were undeliverable, giving an effective mailing of 7,008 email surveys. Of the 2,763 total participants emailed, 673 (24%) responded. Seven hundred forty-four (27%) responded to the mail survey. Thus, for our analysis, 5,531 people were surveyed in the 2017 Nebraska Teal Survey, with 26% ($n = 1,417$) responding.

Hunters were asked if they had hunted teal in any of the past four September teal seasons; 73% ($n = 1,040$) of those responded indicated “Yes” they had hunted and 27% ($n = 377$) said “No” they had not (Fig. 2).

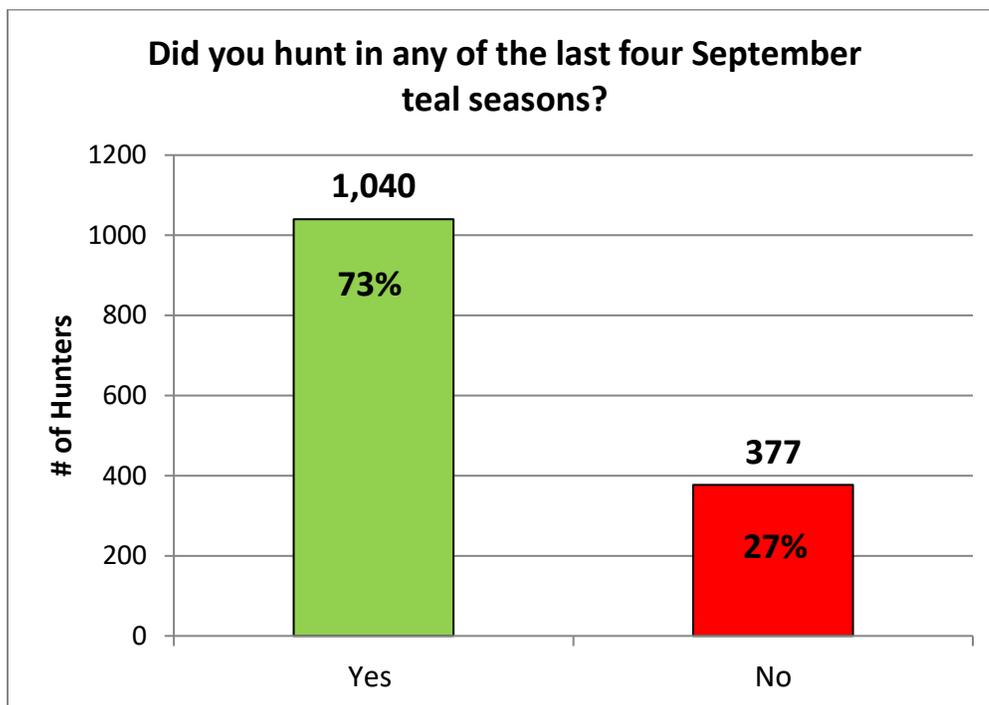


Figure 2. The number of respondents who indicated if they had hunted teal in any of the past four September teal seasons in Nebraska.

When asked their preference for opening day of September teal season, 541 (38%) said “First weekend *after* Labor Day weekend”; 342 (24%) indicated “Labor Day weekend”; 423 (30%) said “Does not matter to me”, 87 (6%) indicated “Other”, and 24 (2%) respondents left the question blank (Fig. 3). If respondents checked “Other” they were asked to specify and those responses varied greatly. Some examples were: “Close the season entirely”, “2 weeks after Labor Day weekend”, “the week before Labor Day weekend”, and “Around the 15th of September”.

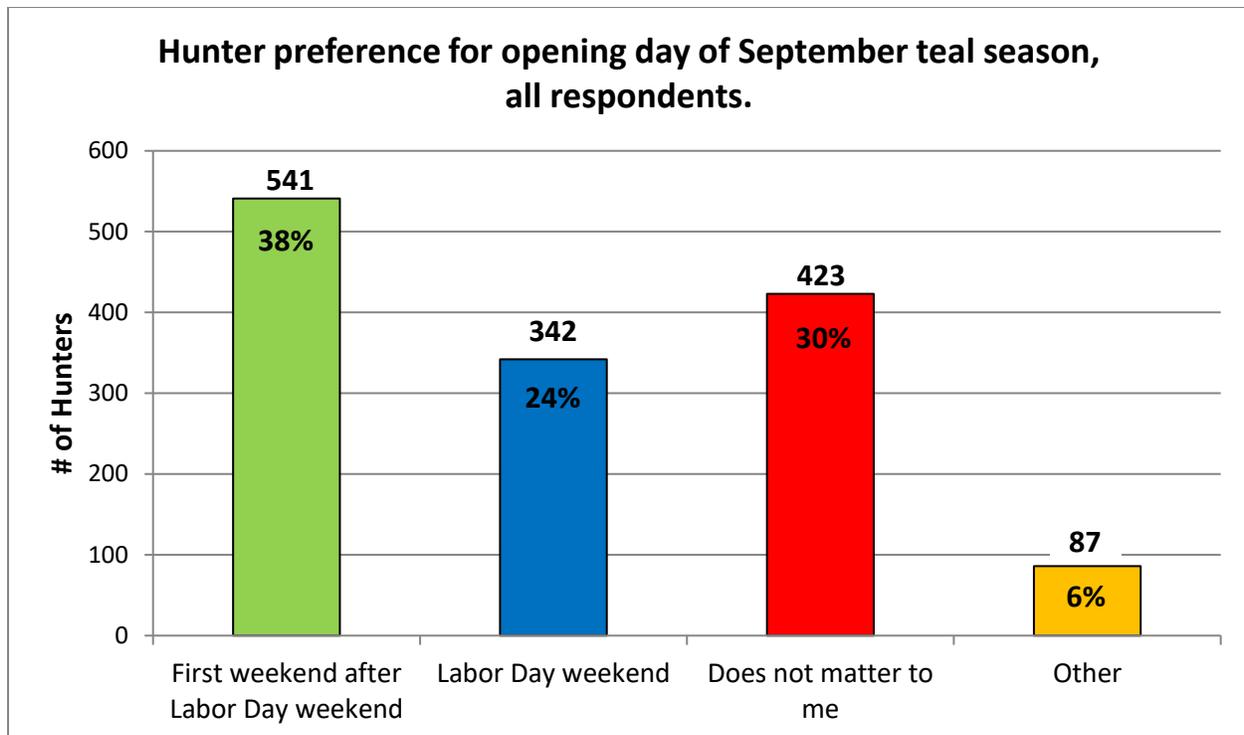


Figure 3. Preferences for Nebraska residents on the opening weekend for September teal season. Results are from all respondents, including those indicating they did not hunt.

To better reflect preferences for teal season among active teal hunters, we only considered responses from those individuals that had hunted teal in any of the last four teal seasons. From those 1,040 respondents (Fig. 2), the first weekend after Labor Day weekend remained the highest preference, with 45% ($n = 468$) of responses (Fig. 4). This represented a slight percentage increase in preference for a teal season that opens the first weekend after Labor Day weekend compared to Labor Day weekend (45% vs. 29% for teal hunters and 38% vs. 24% for all respondents). Responses to: “Does not matter to me” declined considerably, with only 19% indicating no preference from teal hunters compared to 30% for all respondents. The “Other” category responses remained similar between the two groups of respondents (Figs. 3 and 4).

To examine potential differences in season dates between Low and High Plains teal hunters, respondents were divided by the zone(s) where they did most of their teal hunting. The majority of teal hunters indicated they hunted in the Low Plains teal zone (69%; $n = 982$) and 17% ($n = 239$) indicated the High Plains zone. Only 2% ($n = 31$) of respondents indicated they hunted the Low and High Plains zones equally. Another 2% ($n = 31$) indicated that were not sure what zone they hunted. Ten percent ($n = 134$) of respondents left that question blank.

Based on those respondents that indicated they’d hunted teal in any of the past four teal seasons, opening teal season the first weekend after Labor Day weekend had the most responses for both the Low (44%; $n = 374$) and High Plains (48%; $n = 67$) zones, with a higher percentage preference for the first weekend after Labor Day weekend in the High than the Low Plains zone (Fig. 5).

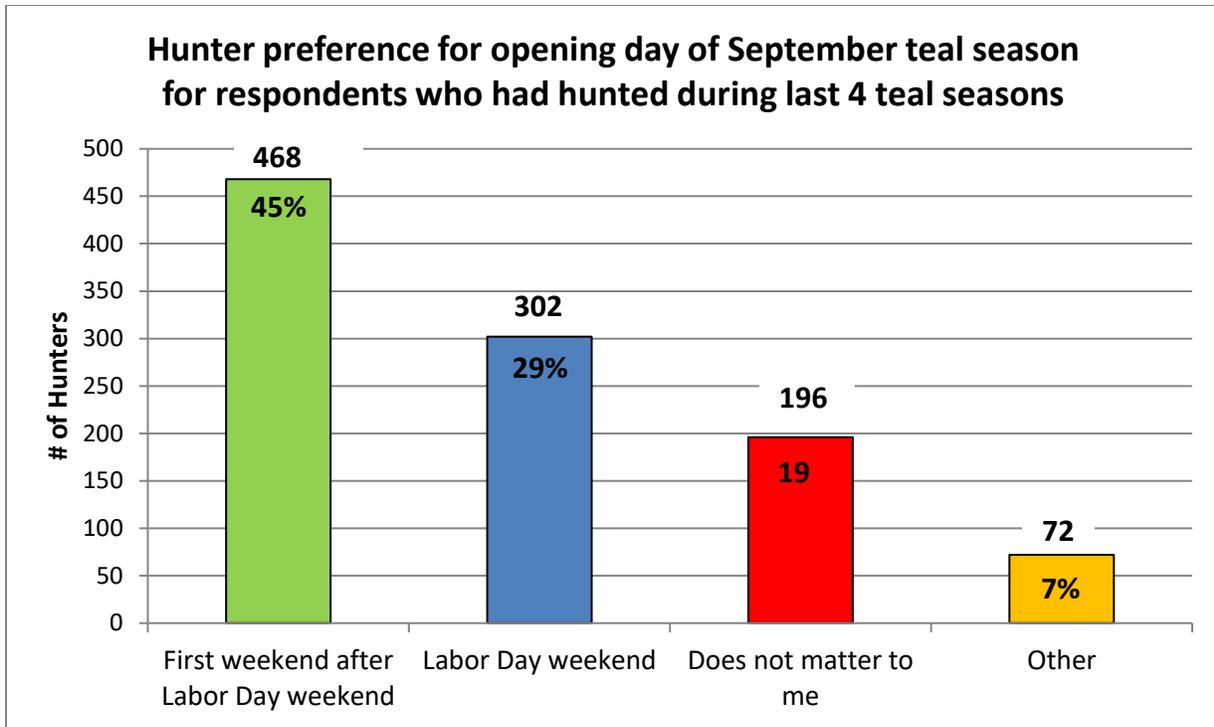


Figure 4. Preferences for opening dates of September teal seasons for those individuals indicated they had hunted teal in Nebraska in any of the last four teal seasons.

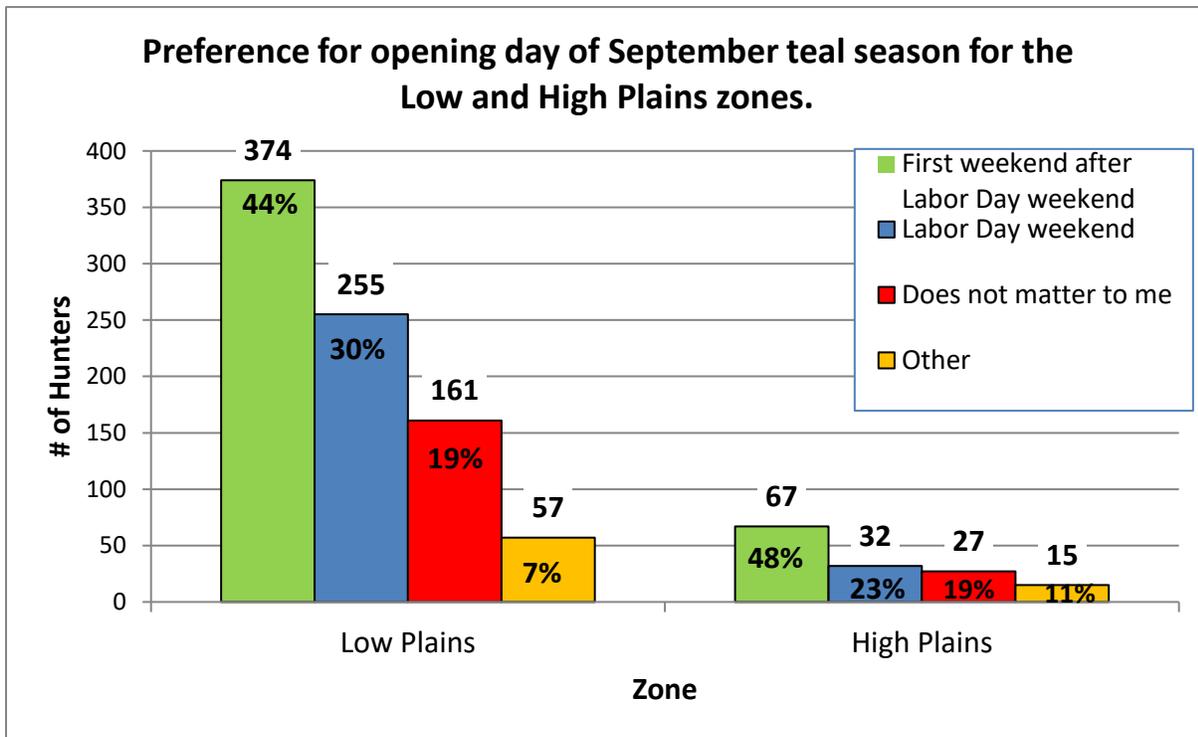


Figure 5. Preferences for opening dates of September teal seasons for those individuals indicated they had hunted teal in Nebraska in any of the last four teal seasons in the Low and High Plains teal zones.

Finally, individuals were asked where they did most of their teal hunting. Of those responding (86 did not respond), most (33%; $n = 452$) indicated they hunted on public land owned or leased by NGPC or the U.S. Fish and Wildlife Service (Fig. 6). An additional 4% ($n = 55$) also said they hunted public land, but was land owned by an agency other than NGPC or U.S. Fish and Wildlife Service (Fig. 6). Twenty eight percent ($n = 402$) of respondents indicated they hunted on private lands, where they had obtained permission from the landowner (Fig. 6). Approximately 14% of teal hunters hunted on private land owned by them or by family (Fig. 6). One hundred thirty four respondents (10%) said they hunted on private land where they paid a daily or seasonal fee or lease, approximately 5% ($n = 66$) indicated other areas or they did not teal hunt.

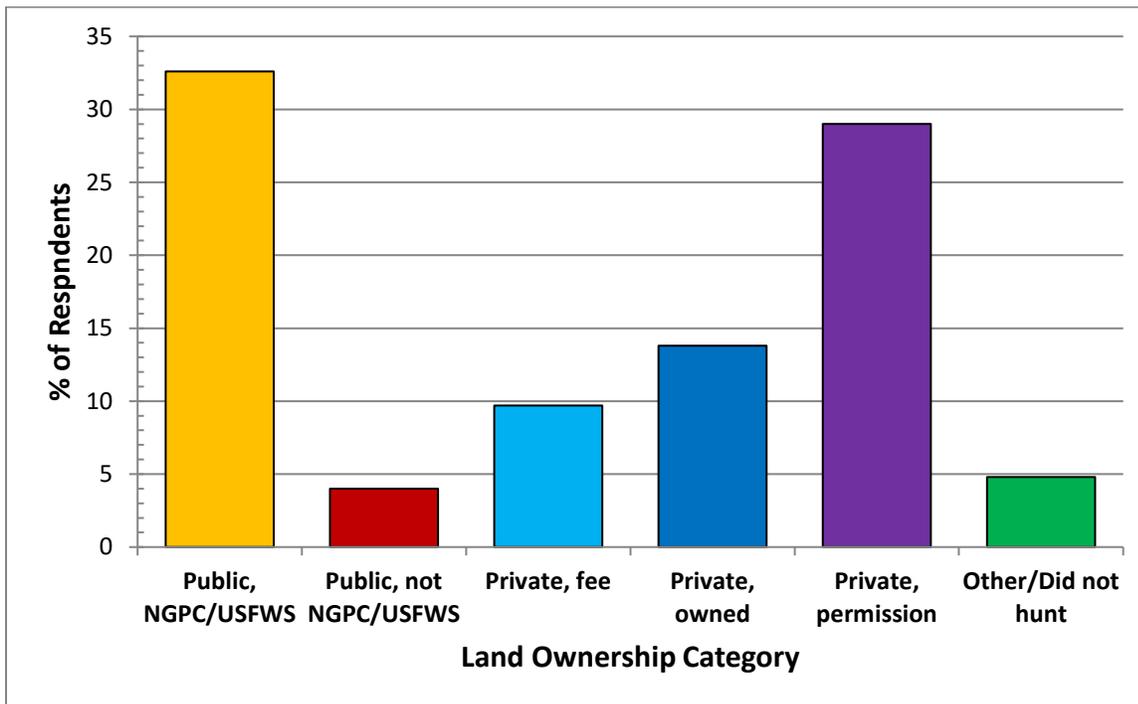


Figure 6. The percent of respondents on what type of land ownership where they indicated they had conducted most of their September teal hunting in Nebraska.

DISCUSSION

Preference for the first weekend after Labor Day weekend was not unexpected, as two, similar and recent (2012 and 2016) surveys conducted by NGPC indicated similar preferences. The question regarding preference of dates was slightly different than those surveys, which also included an option for 1-16 September as season dates.

Preference for the first weekend after Labor Day weekend may stem from multiple, interacting motives. Less support for Labor Day weekend may have individuals wanting to participate in other activities then, or individuals believe it's too warm for teal hunting or a perceived lack of blue-wings in the state, or other factors that make it less attractive, despite that most individuals likely have an additional day of time from work. Our survey instrument did not contain

questions as to individual motives in support or opposition behind preferences. Although understanding of individual motives behind preferences would increase knowledge of hunter behavior, addressing those motives are likely out of the control of NGPC beyond season dates. Few published data exist to compare the use of different lands for hunting among teal hunters, or those participating in regular duck seasons for that matter, in Nebraska or elsewhere in the U.S. Thus, we are uncertain if the amount of public land use for teal hunting is relatively high or low compared to other periods of time or states. Furthermore, we are uncertain how participation would be affected if the amount of public land increased or decreased.

Due to time and logistical constraints, we did not conduct a non-response bias on the mail survey and are unable to ascertain the degree of any nonresponse bias (Dixon and Tucker 2010). However, the number of responses received ($n = 1,040$) provided a sufficient enough quantity to be able to detect possible differences (Land and Zheng 2010). Three reminders for the email portion of the survey provided sufficient reminders and possibly avoid most nonresponse bias.

MANAGEMENT IMPLICATIONS

Based on the results of the survey, September teal season date recommendations would likely follow hunter preferences for the first weekend after Labor Day weekend. However, biological factors or other considerations may impact such recommendations. It is recommended that similar surveys be conducted periodically to monitor any changes in preferences. Surveys determining hunter satisfaction with season dates also would provide evidence for shifting or changing preferences.

Given the dependency on public lands by over one-third of Nebraska teal hunters, expanding or increasing opportunities for public access may lead to greater participation and/or increased satisfaction among teal hunters. Better understanding of the demography of teal hunters may provide insight as the need of expanding public land access for teal hunting, as well as for regular duck hunting seasons.

ACKNOWLEDGEMENTS

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