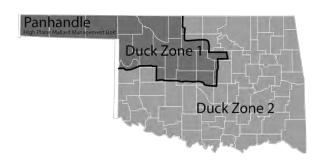
2018 Waterfowl Hunter Survey Executive Summary Josh Richardson, Betsey York, and Corey Jager

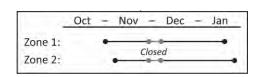
I. Introduction

State wildlife agencies are responsible for setting hunting season parameters to ensure healthy populations of wildlife. Sometimes a variety of options are biologically acceptable, yet hunter preference among the range of choices can vary. Such is the case in setting duck hunting seasons in Oklahoma.

States share responsibility for migratory bird management with the U.S. Fish and Wildlife Service. Waterfowl populations are assessed annually at a continental level, and, within a flyway system, states are provided harvest packages as appropriate for current conditions. The USFWS sets the boundaries for state bag limits, season dates and number of hunting days, but allows states to choose more restrictive seasons if preferred, and to establish zones with varied seasons.

States in the Central Flyway have been under a "liberal" package since 1995. Under this package, Oklahoma can choose a 74-day duck season from an approximately 130—day window (opening no earlier than the Saturday after September 24 and closing no later than January 31). Oklahoma is split into two main zones with varied starting and ending dates to reflect the pattern of waterfowl migration across the state from northwest to southeast. The zones also have a split season, providing a 12-day period of refuge. The panhandle is part of a multi-state High Plains Mallard Management Unit, with season parameters set for the region by USFWS.





In the fall of 2018 the Oklahoma Department of Wildlife Conservation (ODWC) surveyed waterfowl hunters to learn about their preferences on a variety of topics, including waterfowl seasons and zones. The survey focused primarily on hunters in Zones 1 and 2, which are Oklahoma's highest participation zones for waterfowl hunting. The Wildlife Department wanted to assess hunter preferences for the number of waterfowl hunting zones, the boundaries between the current zones in Oklahoma, the season dates of waterfowl season, and their preference pertaining to the timing of the split.

II. Methods

The survey was conducted as a census of all hunters who registered for the Harvest Information Program (HIP) during 2017, and all Oklahoma hunting license holders aged 65 and older who had an email address on file, as hunters 64 or older are exempt from HIP requirements in Oklahoma. This sampling frame consisted of 40,072 hunters. The survey was conducted online with email invitations sent to participants. The first email invitation was sent to HIP permit holders in early September 2018 with a reminder sent in late September 2018 to non-respondents. The senior hunting sample was emailed their first survey invitation in early October 2018. ODWC also posted on its social media accounts to encourage waterfowl hunters to check their email inboxes and participate. The survey closed and analysis began in early December 2018.

III. Results

The survey yielded 8,627 responses. Of these, 5,608 hunted waterfowl at some point in the past five years. With an estimated 10,000-15,000 waterfowl hunters in Oklahoma (Central Flyway Council, USFWS Data Book 2018), this equates to a response from around one-third of our waterfowl hunting population in Oklahoma. The respondents were geographically represented across the state, with representation from hunters who do not live in Oklahoma. The average age was 44 and the average length of having hunted waterfowl was 17 years. Respondents were 98% male.

If hunters indicated they had not hunted in the last five years, they were screened out of participating in the rest of the survey. For active waterfowl hunters, we first inquired where they hunted most often for waterfowl. Zone 2 was hunted most often by waterfowl hunters (76%; Fig.1). This zone contains significantly more waterfowl habitat, is larger, and contains more people than Zone 1 and the Panhandle.

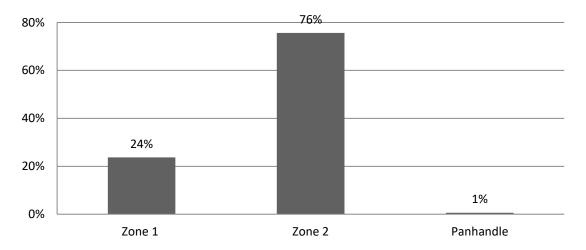


Figure 1: "In which zone have you hunted waterfowl most often in Oklahoma in the last 5 years?" (n=4,700)

In all zones, free private land was used most often for waterfowl hunting. For Zone 1 hunters, 64% of respondents used free private land, while 51% of Zone 2 hunters did. Public land was used more often in Zone 2 (36% use) than in Zone 1 (20% use).

Respondents were asked a series of questions relating to satisfaction with zones. Overall, hunters were satisfied with the number of zones in Oklahoma (Fig. 2). They were also satisfied with the current zone boundaries (Fig. 3), but when asked their preferred zone configuration in the future, a considerable plurality (especially for Zone 1) favored combining the state into a single zone (Fig. 4).

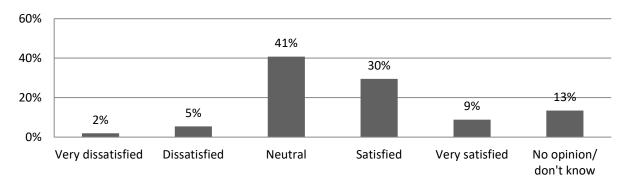


Figure 2: "How satisfied are you with the number of zones in Oklahoma?" (n=4,302)

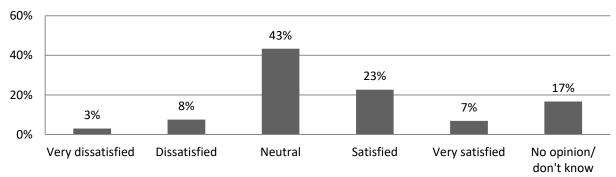


Figure 3: "How satisfied are you with the current boundaries of zones in Oklahoma?" (n=4,292)

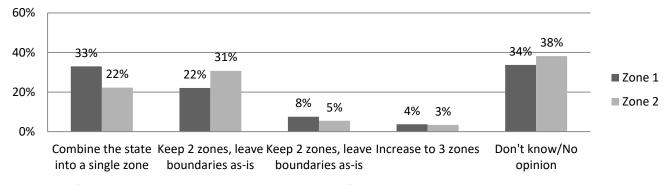


Figure 4: "What is your opinion on zones in Oklahoma?"

When determining satisfaction related the split in the season and the timing of the split, we looked at the results based on which zone respondents said they hunted in <u>most often</u> in the past five years. We asked hunters how satisfied overall they are with having a split in the season. Zone 2 hunters leaned towards being slightly more satisfied with the split than Zone 1 hunters (Fig. 5). We also asked how satisfied they are with the timing of the split (Fig. 6). Once again, Zone 2 hunters were more satisfied.

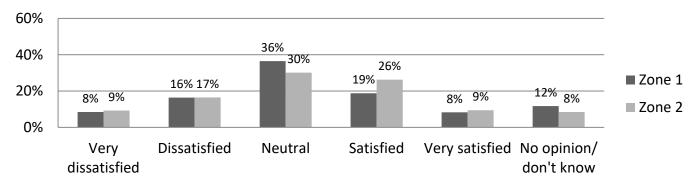


Figure 5: "How satisfied are you with having a split season?" separated by zone hunted most often.

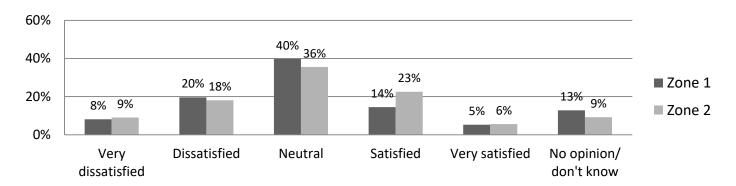


Figure 6: "How satisfied are you with the timing of the split?" separated by zone hunted most often.

We also wanted to know what waterfowl hunters prefer for regulations within specific zones. To understand the desires of those affected by the regulations we looked at Zone 1 regulations based on responses from those who hunt most often in Zone 1 and similarly in Zone 2. The panhandle zone was not considered in analysis as ODWC does not have the authority to adjust regulations for that zone.

For Zone 1 and Zone 2 we asked waterfowl hunters what length of split and timing of the season they prefer, or if they want the split completely removed. For **Zone 1** hunters, the most common answer was that they did not know nor had no opinion on their preference for the split (Fig. 7). We removed

respondents who did not know nor had no opinion, and combined all of the options that indicated keeping a split of some kind ("keep the 12 day split", "reduce to a five day split", and "increase to a 19 day split"). This revealed overall whether Zone 1 hunters want to keep a split or remove the split (Fig. 8). Zone 1 waterfowl hunters prefer more late-season days, if the split is removed, by opening the season later and ending the season later (Fig. 9; 41%).

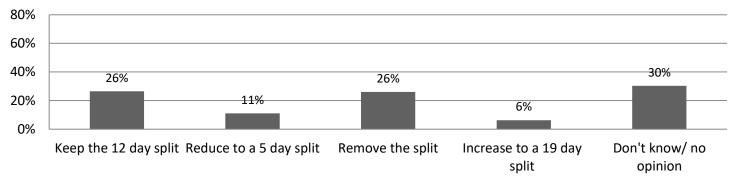
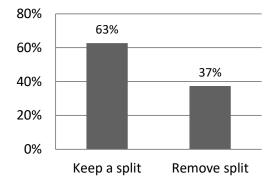


Figure 7: Zone 1 hunter responses to the question, "Which of the following options would you prefer for the split in Zone 1?" (n=918)

Figure 8: Zone 1 hunter responses indicating a desire to keep a split of some kind versus removing a split in the waterfowl hunting season for Zone 1. (n=640)



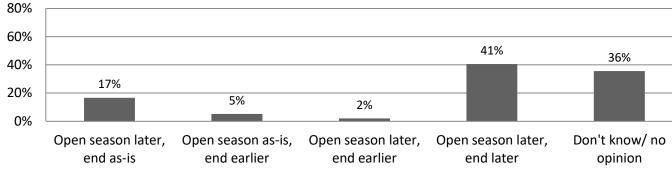


Figure 9: Zone 1 hunter responses to the question, "If the Zone 1 split is removed, which adjustment would you prefer?" (n=919)

We conducted the same analyses for **Zone 2**. We first looked at what length of split Zone 2 hunters prefer (Fig. 10), and then removed hunters with no opinion, creating a binary variable showing those who prefer to keep a split versus remove the split (Fig. 11). Finally, we interpreted the results Zone 2 hunters' opinion on removing the split and how they want that to affect the waterfowl season in Zone 2 (Fig. 12). They prefer the option, "open season later, end as-is".

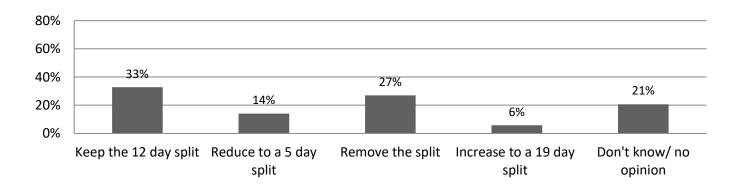
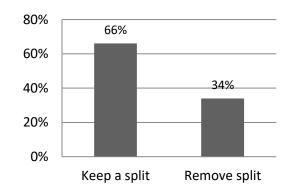


Figure 10: Zone 2 hunter responses to the question, "Which of the following options would you prefer for the split in Zone 2?" (n=3,282)

Figure 11: Zone 2 hunter responses indicating a desire to keep a split of some kind versus removing a split in the waterfowl hunting season for Zone 2. (n=2,604)



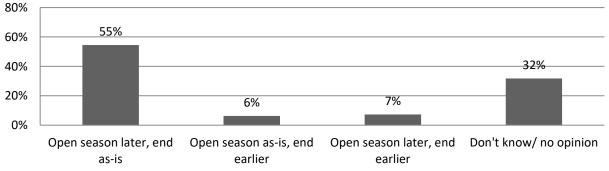


Figure 12: Zone 2 hunter responses to the question, "If the Zone 2 split is removed, which adjustment would you prefer?" (n=3,294)

"Being outdoors" and "spending time with friends and family" are the most important aspects of waterfowl hunting for hunters in Oklahoma (85% selected very important and 82% selected very important respectively). This survey also asked hunters what days and species they prefer to hunt as this information is beneficial to consider should dates be altered in the future. Preference lies in hunting on Saturdays and Sundays (Fig. 15) as well as Thanksgiving weekend and Christmas (Fig. 13). Mallards are the most desirable species to hunt, but hunters mostly prefer to target any legal duck (Fig. 14).

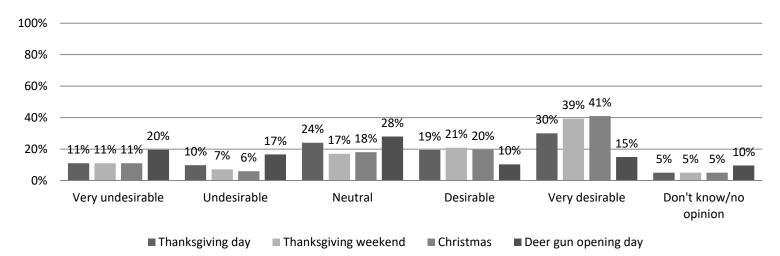


Figure 13: "In your opinion. How desirable or undesirable is it to have waterfowl season open during each of the following periods:"

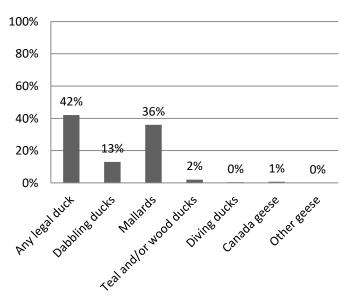


Figure 14: "Which of the following types of waterfowl do you target most often when waterfowl hunting?"

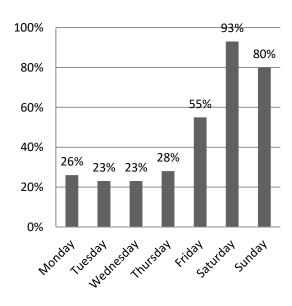


Figure 15: "Which day or days of the week do you typically hunt waterfowl? Check all that apply."

IV. Summary

We obtained input from approximately one-third of waterfowl hunters who participated in Oklahoma in the last five years. Overall, the results of this survey paint a picture of Oklahoma duck hunters who are relatively satisfied with regulations as-is.

The number of zones is more problematic for Zone 1 hunters than Zone 2 hunters, with most of those who are dissatisfied wanting to combine the state into one zone rather than adjust the boundary. Hunters in both zones are divided in their opinion on the 12-day split. If changes are made (i.e., removal of the split, adjustment to the timing, or adjusting the length of the split), hunters do not wish to lose late-season days in either zone. An adjustment, if made, should also consider the desirability of weekends and specific holidays to be open for hunting. No changes to the number of zones or zone boundaries can be made until the spring of 2020, as federal regulations only allow changes on a set 5-year schedule. The results of this survey will be revisited when regulations are up for alteration.