### Report on Survey of New York Hunters about Crossbows

### Purpose

The New York Department of Environmental Conservation (DEC) Division of Fish and Wildlife sought to gather more information about current and potential crossbow use and hunter preferences related to crossbow hunting in the state.

### Methods

We designed a survey to find out how hunters currently use crossbows for big game hunting and what preferences they have on the use of crossbows.

We identified survey participants by randomly selecting 10,000 licensed hunters from a pool of hunters who provided an email address with their contact information to the state. Current law in New York State requires hunters who seek to use a crossbow during the big game bow or muzzleloader season to possess a muzzleloader hunting privilege; we therefore partitioned our sample selection to include a random draw of 5,000 general license holders and a random draw of 5,000 holders of the muzzleloader privilege.

On December 31, 2018, we sent emails to the 10,000 selected hunters with a link to the survey; however, 652 emails were bounced and never reached their intended recipient. We sent three reminders to the recipients during the 37 days the survey was open. We closed the survey on February 2, 2019.

We identified four Wildlife Management Units (WMUs) where crossbow hunting is not allowed: 1C (Suffolk County), 3S (Westchester County), 4J (a portion of Albany County), and 8C (a portion of Monroe County). For some of the questions, we compared the responses of hunters who primarily hunt in those WMUs to hunters who primarily hunt in other WMUs.

The data from the survey were compiled and summarized automatically by SurveyGizmo and manually using Microsoft Excel. Inconsistencies between the responses to Questions 2 and 3 suggested that respondents may have been confused about whether "No" or "Not Applicable" was the appropriate choice for their situation. Those two response categories have therefore been combined in the presentation of results.

#### **Results**

A total of 3,772 survey recipients completed the entire survey, and 73 partially completed the survey. Thus, we had 3,845 total respondents. Our response rate, including complete and partial responses, was 41.1%. The average number of respondents for each of the eight non-ID survey questions was 3778 (SD: 11).

#### Q1: Do you hunt big game in New York with a vertical bow (compound, longbow, recurve bow)?

More than two thirds of respondents said that they hunt big game with a vertical bow (compound, longbow, or recurve bow) (n=3784; Figure 1).

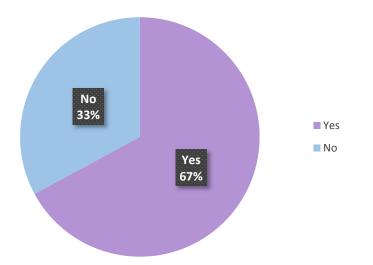


Figure 1. The percentages of respondents who do and do not hunt with a vertical bow.

#### Q2: Do you use a crossbow for hunting during the last 10-14 days of the early bow season?

Under half of all respondents use a crossbow during the last 10-14 days of the early bow season (n=3783; Figure 2). Most respondents either do not hunt with a crossbow or do not use a crossbow during the last 10-14 days of the early bow season.

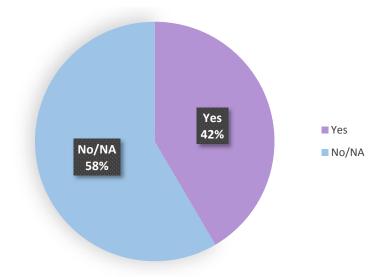


Figure 2. The percentages of respondents who do and do not use a crossbow during the last 10-14 days of the early bow season.

The pattern of responses from hunters who primarily hunt in WMUs 1C, 3S, 4J, and 8C was similar to the overall response pattern. Most respondents who primarily hunt in these WMUs (n= 128) do not use a crossbow during the last 10-14 days of early bow season (Figure 3). However, almost 40% of them do, which suggests that they make an effort to find a place where they can do so.

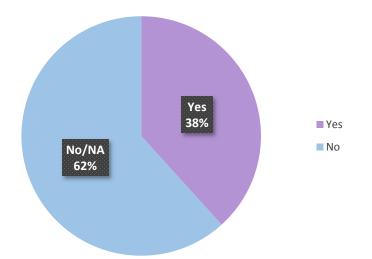


Figure 3. The response from hunters who primarily hunt in WMUs 1C, 3S, 4J, and 8C regarding whether they use a crossbow during the last 10-14 days of early bow season.

## Q3: If you currently use a crossbow for hunting, would you increase the number of days you use it if crossbows were allowed during the entire bow season?

Half of all respondents would increase the number of days they use crossbows if crossbows were allowed during the entire bow season (n=3781; Figure 4). The remaining respondents either do not hunt with a crossbow or would not increase the number of days spent hunting with a crossbow if it were allowed during the entire bow season.

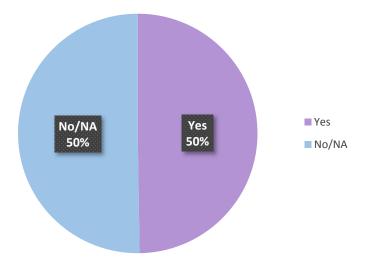


Figure 4. The percentages of respondents who would and would not increase the number of days they use crossbows if the season were extended.

### Q4: If you currently do not own a crossbow, would you acquire and use one for hunting if they were allowed during the entire bow season?

Of the respondents who currently do not own a crossbow (n=2234), a majority would acquire and use a crossbow for hunting if they were allowed during the entire bow season (Figure 5).

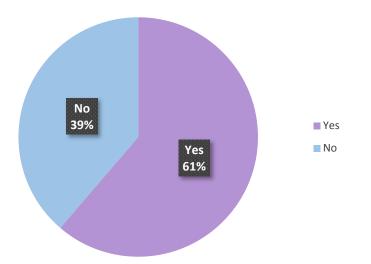


Figure 5. The percentages of respondents who would and would not acquire and use a crossbow for hunting if the season were extended.

The pattern of responses to this question was similar for respondents who primarily hunt in WMUs 1C, 3S, 4J, and 8C (n=153) and respondents who primarily hunt in other WMUs (n=2056) (Figure 6). However, hunters who primarily hunt in the WMUs where crossbows aren't allowed were twice as likely to say that they would acquire and use a crossbow while hunters who primarily hunt in other WMUs were only 1.5 times as likely.

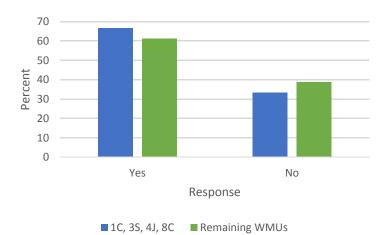


Figure 6. A comparison of responses from hunters who primarily hunt in WMUs 1C, 3S, 4J, and 8C and hunters who primarily hunt in other WMUs on whether non-crossbow owners would acquire and use a crossbow for hunting if they were allowed to use it during the entire bow season.

### Q5: Would you prefer that hunters purchase a bowhunting privilege or muzzleloading privilege to hunt with a crossbow?

Most respondents would prefer purchasing a bowhunting privilege rather than a muzzleloading privilege to hunt with a crossbow (n=3781; Figure 7). Approximately one of every five respondents was unsure of his/her preference.

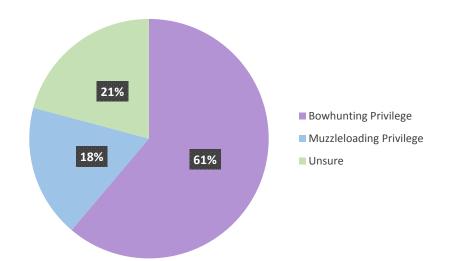


Figure 7. The percentages of respondents who would prefer to purchase a bowhunting privilege and a muzzleloading privilege to hunt with a crossbow as well as the percentage of respondents who were unsure of their preference.

# Q6: Do you think hunters should be allowed to use a crossbow when hunting in Suffolk County and in the archery-only WMUs: WMU 3S (Westchester County), WMU 4J (portion of Albany County), and WMU 8C (portion of Monroe County)?

A majority of respondents think that hunters should be allowed to use a crossbow when hunting in Suffolk County and in the archery-only WMUs: WMU 3s (Westchester County), WMU 4J (portion of Albany County), and WMU 8C (portion of Monroe County) (n=3784; Figure 8). More than a quarter of respondents were unsure.

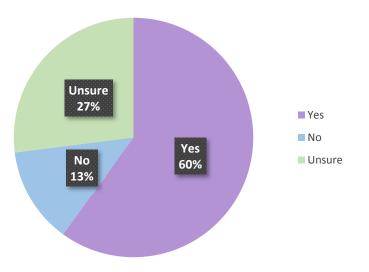


Figure 8. The percentages of respondents who think hunters should and shouldn't be allowed to use a crossbow when hunting in Suffolk County and in archery-only WMUs 3S, 4J, and 8C, as well as the percentage of respondents who were unsure of their preference.

The pattern of responses to this question appeared to differ slightly between respondents who primarily hunt in WMUs 1C, 3S, 4J, and 8C (n=203) and those who primarily hunt in other WMUs (n=3549). More respondents who primarily hunt in WMUs 1C, 3S, 4J, and 8C expressed an opinion and fewer were unsure compared to respondents who primarily hunt in other WMUs (Figure 9). Within the group who primarily hunt in the WMUs where crossbows aren't allowed, approximately four times as many hunters were in favor of allowing crossbows as were opposed to it.

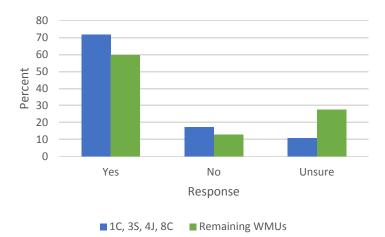


Figure 9: A comparison of responses on whether hunters should be allowed to use a crossbow when hunting in Suffolk County and in archery-only WMUs 3S, 4J, and 8C from respondents who primarily hunt in WMUs 1C, 3S, 4J, and 8C and respondents who primarily hunt in other WMUs.

### Q7: Do you think 12- and 13-year-olds should be able to hunt with a crossbow (as they can with a vertical bow)?

More than half of the respondents support allowing 12- and 13-year-olds to hunt with a crossbow (n=3784; Figure 10). One-tenth of the respondents were unsure.

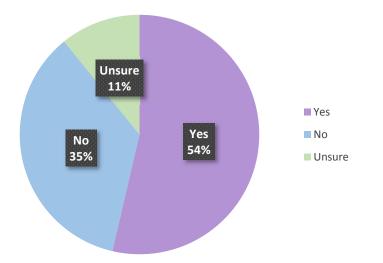


Figure 10. The percentages of respondents who think that 12- and 13-year-olds should and shouldn't be allowed to hunt with a crossbow (as they can with a vertical bow) as well as the percentage of respondents who were unsure of their preference.

#### Q8: In which WMU do you hunt most often?

The responses demonstrated that our respondents were spatially distributed across the state, representing 81 of 89 WMUs.

### Summary

Most respondents who don't own a crossbow said that they would get one if crossbows could be used during the entire big game bow season. By a more than 3-to-1 margin, respondents are in favor of purchasing a bowhunting privilege rather than a muzzleloading privilege to hunt with a crossbow. Most respondents are also in favor of allowing 12- and 13-year-olds to hunt with crossbows and allowing crossbow use in archery-only WMUs. With respect to the latter question, respondents who hunt primarily in the affected WMUs support allowing crossbow use there by a 4-to-1 margin.

Most respondents don't use a crossbow during the portion of the early bow season when it is allowed, but we were unable to determine how many of those don't use a crossbow at all. Similarly, although half of the respondents said that they would increase their crossbow use if crossbows were allowed throughout the bow season, we were unable to determine how many of the rest don't use a crossbow at all.