

Summer duck hunting season harvest and participation in North Canterbury 2024

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Photo credit: Richard Cosgrove

Executive Summary

NCFG conducted phone surveys of North Canterbury game bird licence holders to estimate harvest and participation over two distinct periods. The participation rate of NC licence holders in the mallard season was 3.1%, with a total estimated harvest of 354 mallards in North Canterbury and 262 mallards in Central South Island Fish and Game region. The participation rate of the paradise shelduck season was 2.5% in period one and 6.0% in period two, with a total estimated harvest of 2,215 paradise shelducks over the six-week season. An additional 500 paradise shelduck were harvested in Central South Island Fish and Game region by North Canterbury licence holders.

Introduction

Summer duck hunting seasons provide more opportunity for game bird licence holders to go harvest some game birds throughout the year. The mallard season allows hunting only on harvested crop fields and spanned the first two weekends in February, the 3rd-4th and 10th-11th. The paradise duck season spanned February 3rd – March 10th.

This is the third year of implementation of the summer mallard season, with the paradise shelduck season starting over 10 years ago. This was the first season that there was no mallard hunting in Area A in North Canterbury.

North Canterbury Fish and Game (NCFG) staff conducted a survey in 2024 to assess bird hunter sentiments towards and participation in the summer duck season. There are three objectives associated with the summer duck survey:

- 1) Estimate harvest of mallards and paradise ducks
- 2) Estimate participation rates of license holders in the two seasons

Methods

Survey tool: North Canterbury Fish and Game staff conducted phone surveys during two periods, February 12th-16th and March 11th-15th, with the intent of getting 200 responses per survey period. The first survey period included questions about participation and harvest of mallards and paradise shelducks between February 3rd and February 11th, while the second survey period assessed harvest and participation of paradise shelducks between February 12th and March 10th. Respondents not surveyed in period one were also asked about the mallard season to boost sample sizes.

Survey respondents: The North Canterbury game bird licence database was subset to hunters that had provided phone numbers and held a valid hunting license during the summer hunting season. A random sample of 500 hunters was pulled for each survey period using the sample function in program R. Survey questions are included in appendix 1.

Analysis: Harvest estimates were calculated for the each sample frame and then extrapolated across the total number of valid game bird licences in North Canterbury. Confidence intervals were calculated for participation rates and support of summer seasons at 95% levels. North Canterbury licence holders that hunted in the Central South Island Fish and Game region (CSI) had data recorded and harvest estimates calculated in the same manner.

Results

Mallards: There were 2,501 adult game bird licence holders that held valid licences during the summer season. Staff successfully completed 360 surveys for the mallard season. There was a 3.1% (0-7.7% CI) participation rate in the summer mallard season. Participants hunted 1.5 (1.2-1.8 CI) days and harvested 8.3 (\pm 2.1) mallards per hunt on average. Total harvest

was estimated to be 354 mallards (260-449 CI) for the four-day season in North Canterbury (Figure 1). Estimated mallard harvest of North Canterbury hunters that hunted in CSI was 262.

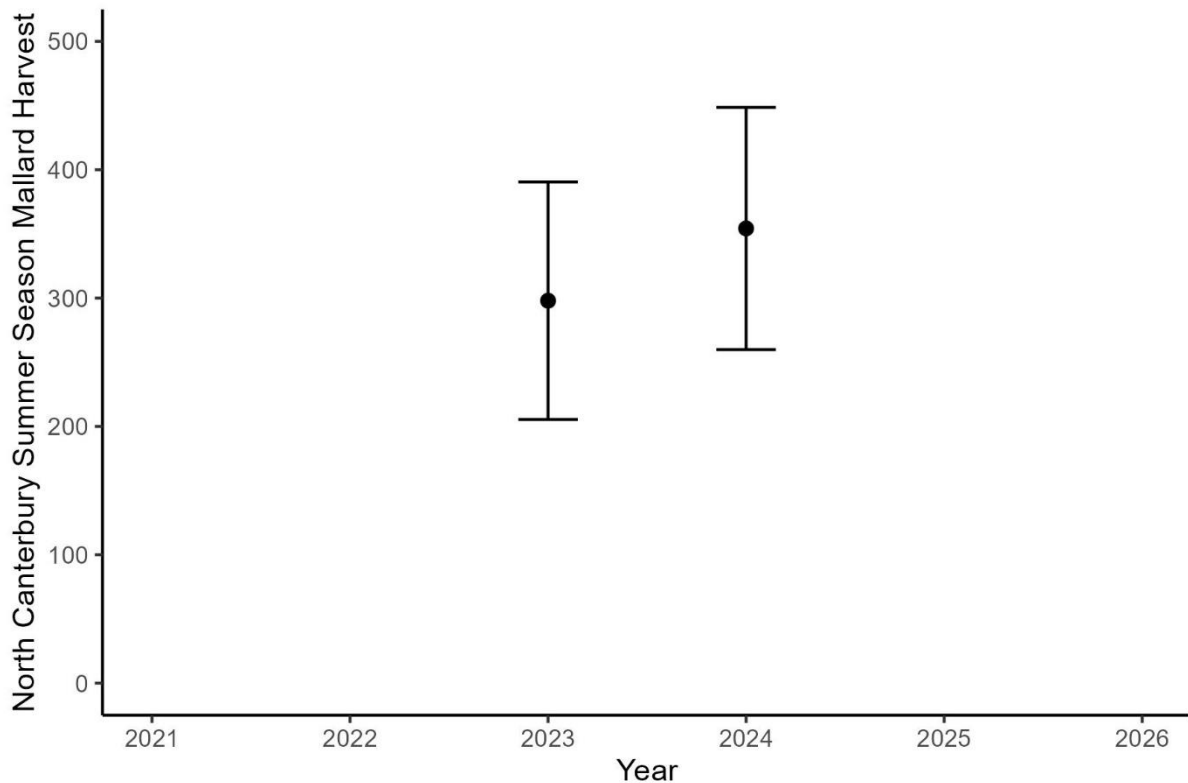


Figure 1. Mallard harvest (+/- standard error) during the summer season in North Canterbury 2023-2024.

Paradise shelducks: There were 200 surveys completed in period one and 182 completed in period two. There was a 2.5% (0.0-9.1% CI) participation rate in the first half of the summer paradise shelduck season. Participants hunted 1.6 (CI = 1.3-1.9) days and shot 9.8 (\pm 5.3) paradise shelducks on average. During the second half of the season there was a 6.0% (0.0-13.0% CI) participation rate and participants hunted 1.6 (CI = 1.3-1.9) days and shot 13.9 (\pm 3.5) paradise shelducks on average. Total harvest was estimated to be 2,215 paradise shelducks (CI 1,482 – 2,948) during the whole summer season in North Canterbury (Figure 3). An additional 500 paradise shelduck (CI = 368-632) were harvested in CSI by North Canterbury licence holders.

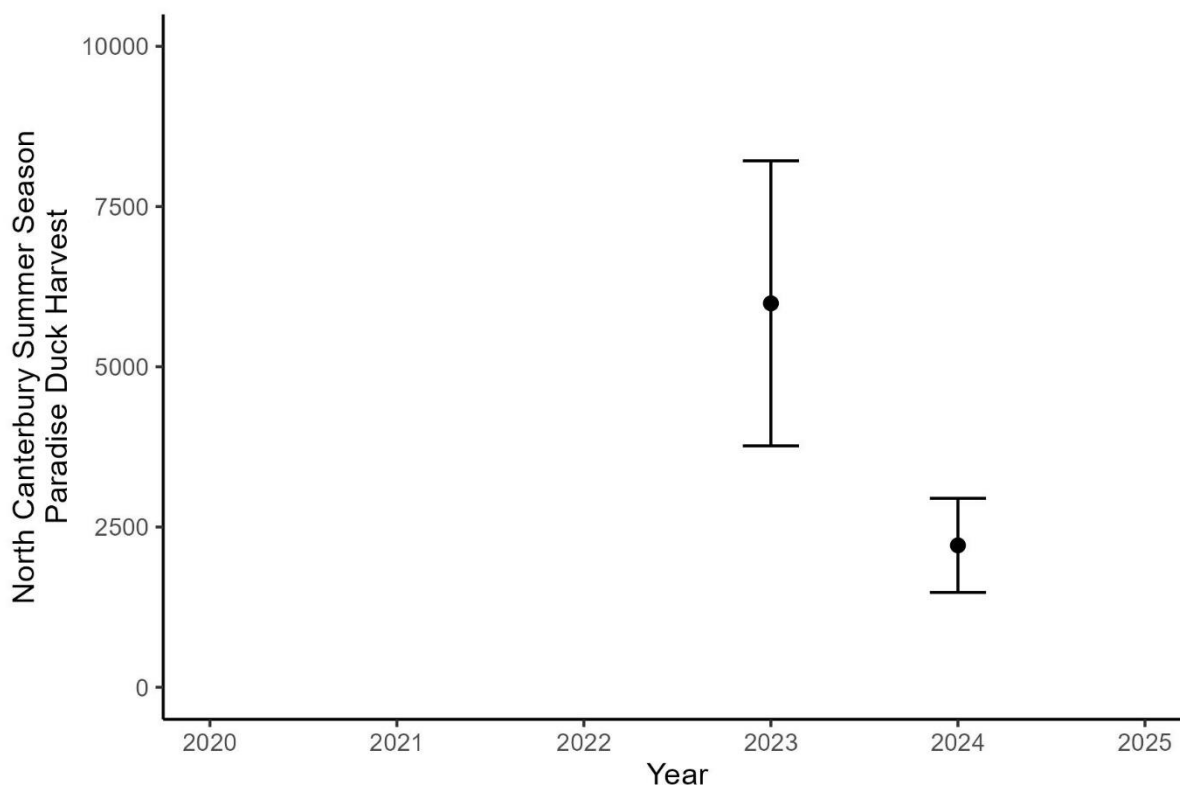


Figure 3. Paradise shelduck harvest (+/- standard error) during the summer season in North Canterbury in 2023.

Discussion

Hunters in North Canterbury participate in the summer mallard seasons at a low rate, therefore, the two-weekend mallard season constitutes a small amount of harvest. However, this harvest estimate is bias low as the survey was limited to game bird licence holders who purchased their licence from North Canterbury, and it is likely that some hunters that purchase licences in other Fish and Game regions travel to participate in this opportunity that is limited to the Canterbury Plains. That said, because the summer mallard season is limited to crop fields (i.e., no hunting over water), requires specialist hunting equipment (lay out blinds, full body decoys, etc.), and access to private property, it is unlikely that harvest is substantially higher than our estimates.

The summer paradise shelduck season has a slightly higher participation rate than the mallard season, and hunters have proven to be quite successful. Harvest in 2024 was considerably lower than 2023, primarily due to a reduced participation rate in the first half of the season.

Previous work has shown there is strong support among licence holders for the summer seasons (Garrick and Sanders Garrick 2023). Additionally, these seasons remain an important management tool to disperse birds that may be causing nuisance damage on farmland, as well as adding extra value to the game bird licence by providing more opportunities to hunt. However, continued harvest monitoring is of utmost importance to ensure sustainability of game bird populations for the future hunters of the Canterbury Plains.

Management Implications

North Canterbury has some of the most liberal duck seasons in the country. As a result, these seasons are likely utilised by out-of-region game bird licence holders. Currently there is no understanding of the extent of participation of non-licenced hunters (landowner-occupiers). It

is of paramount importance to better understand the extent of participation from these non-licence holders and out-of-region hunters to provide better insight into harvest in the region.

Literature Cited

Garrick, M.J., and Sanders Garrick, H.S. 2023. Summer duck hunting season harvest, participation, and satisfaction in North Canterbury. Internal Fish and Game report.

Acknowledgements

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Appendix 1

Period 1 survey

- 1) Did you participate in the summer mallard season? (If yes, answer questions 2-4)
- 2) What was the nearest town?
- 3) How many days did you hunt?
- 4) How many mallards did you harvest?
- 5) Did you participate in the summer paradise duck season in North Canterbury between February 3rd and February 11th? (If yes, answer questions 6-8)
- 6) What was the nearest town?
- 7) How many days did you hunt?
- 8) How many paradise shelducks did you harvest?

Period 2 survey

- 1) Did you participate in summer mallard season? (If yes, answer questions 2-4)
- 2) What was the nearest town?
- 3) How many days did you hunt?
- 4) How many mallards did you harvest?
- 5) Did you participate in the summer paradise duck season between February 12th and March 10th? (If yes, answer questions 2-7)
- 6) What was the nearest town?
- 7) How many days did you hunt?
- 8) How many paradise shelducks did you harvest?