A Summary of the 2004-2005 Middle Rio Grande Valley Dark Goose Hunt

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Abstract The New Mexico Department of Game and Fish conducted a special dark goose season within portions of the Rio Grande valley during the 2004-2005 waterfowl season. This represents the tenth time dark geese have been hunted in this region (since the 1982-83 season). Unlimited permits were available to hunt Canada Geese (*Branta canadensis*) and Greater White-fronted Geese (*Anser albifrons*) between January 17 - 23, 2005. Six hundred and ninety-two permits were issued. Data was gathered from post-season questionnaires and used to project harvest and hunter effort. From these 534 returns, it was projected that 184 geese were harvested by 495 hunters for a mean harvest of 0.37 geese per hunter.

INTRODUCTION

Dark goose (Canada and Greater White-fronted) hunting within portions of the Rio Grande valley of New Mexico (Sandoval, Bernalillo, Valencia, Socorro, and Sierra counties) were closed from the 1982-83 through 1994-95 waterfowl seasons. Due to concerns over the declining population of dark geese during this period, it was decided that hunting these geese should cease and efforts initiated to attempt to re-establish a migratory flock wintering in this area. According to A Plan for the Management of Waterfowl, Sandhill Cranes, and other Migratory Birds in the Middle Rio Grande Valley of New Mexico (Plan) (Taylor 1999), a targeted goal of 10,000 wintering dark geese was established. Initial results of this effort were encouraging as this region experienced an increase in the wintering population from the 1981 level of 295 geese. For the past nine years (1995-96 through 2004-2005), New Mexico's Aerial Waterfowl Survey (January surveys) has indicated a stable to slightly increasing wintering population of approximately 5,330 (range 1,361 to 7,972). This figure includes resident and migratory flocks. The January 2005 Rio Grande winter survey recorded 5343 Canada geese however, 7720 were counted during the December survey. This year's harvest was 3.4% of the January wintering population.

Since 1992, the public has requested that the New Mexico Department of Game and Fish (Department) open this region to limited dark goose hunting. Because it seems unlikely that population levels will return to those experienced in the 1970's, in 1995 it was felt that a limited hunt would have no detrimental impact on the wintering population. As a result, the Department recommended and established a limited hunt. One objective was to evaluate the impact of such a hunt on the current wintering population.

Since the 1995-96 season, limited permits have been issued to control the number of MRGV dark goose hunters and limit the harvest. This was to allow a limited harvest while allowing the wintering population to increase towards the goal of 10,000 Canada geese wintering in the MRGV as outlined in the Plan. During the 2002-03 season three hundred permits were issued through random drawing.

For the 2003-04 season, the New Mexico State Game Commission requested the Department offer unlimited over-the-counter permits and increase the seasonal bag limit from, one per day and one per season, to two (2) per day and two (2) per season in order to increase dark geese hunting opportunity in the MRGV. To limit the harvest with unlimited permits and increased bag limit the season was reduced from 23 days to 9 days and scheduled for January 17 - 25, 2004.

For the 2004-2005 season, unlimited permits were issued with the same bag limit of two (2) per day and two (2) per season with a reduction in hunt days from 9 to 7 days. The hunt started on a Monday

to reduce the opening day hunt pressure.

The area open to this hunt was Sierra, Socorro, and Valencia Counties. The hunt includes La Joya and portions of Bernardo Wildlife Management Areas. After the hunt survey forms were mailed to those issued permits and hunters were requested to complete and return the survey. Information requested on the survey included whether or not the permittee hunted, whether successful, which species bagged, number of days hunted, and county hunted. From this information, harvest and hunter effort was projected. Those not responding to the first questionnaire were sent a follow-up questionnaire. This report summarizes the results of this hunt.

RESULTS

Of the 692 permits issued, 534 permittees responded to the questionnaire. Of the 534 respondents, 71.5% (n=382) indicated they hunted. Two waves of the survey were mailed to those that had not returned the first survey to get the 534 responses.

Successful hunters reported the county they hunted. Seventy-five hunters responded that they hunted in Socorro County. Twelve hunters reported that they hunted in Valencia County. Thirteen hunters reported that they hunted Sierra County and one hunter did not report the county they hunted. Table 1 presents data on reported hunter effort and number of geese bagged for each category by the number of days hunted. One hundred and fifty-five hunters reported hunting one day followed by 141 hunters hunted two days and 46 hunters hunted three days. The highest bag occurred for those who hunted one day followed by those that hunted 2 days.

Table 1: Hunter effort and success for the 2004-2005 MRGV dark goose season.

Number Days Hunted	Number of Hunters	Number Bagged	
Hunters-Did Not Hunt	152	0	
Not Reported	0	0	
1	155	64	
2	141	106	
3	46	47	
4	19	25	
5	10	20	
6	2	4	
7	9	3	
Total	534	142	

One hundred and forty-two dark geese were reported harvested by 382 hunters resulting in a reported mean bag of 0.37 geese per hunter. One hundred and forty-two harvested geese were identified as Canada Geese. No white-fronted geese were reported bagged. Sixty hunters (15.7%) reported taking one goose while 41 hunters (10.7%) reported bagging two geese.

Applying the calculated ratios of hunter participation and hunter success to the non-respondents, a projected 184 geese were harvested by 495 hunters with an overall season mean bag of 0.37 geese per hunter.

DISCUSSION

This season's projected harvest of dark geese (184) should not have an impact on the wintering population residing in the MRGV. Projected harvest decreased by 50% from the previous year. Hunter participation decreased 28% over the previous year. Mean hunter success decreased this year by 26%. The reported harvest was taken by 26.4% (101) of the hunters.

Sierra County, Socorro County and Valencia County were the boundary for the 2004-2005 season. Under the current hunt strategy it is uncertain if this harvest level may pose a problem to the wintering dark goose population. The recommendation to adjust the Aerial Waterfowl Survey two hours later in the day when conditions are favorable for sighting dark geese on the river had the desired results in observing dark geese along the Rio Grande. However, it is believed that many Canada geese were missed during the January aerial survey due to the colder weather; and geese staying in fields to feed instead of returning to the river during mid-day. A couple of sites containing geese within Albuquerque are outside the aerial survey so adjustments may need to be made to the survey protocol.

There appears to be an increase in the proportion of small Canada geese wintering in the Rio Grande Valley. It is recommended that tail fan parts envelopes are included with the license packet. This is to obtain an updated estimate of the subspecies composition wintering in the MRGV. It is further recommended that the post season harvest survey continue in order to monitor trends in hunter effort and harvest. The majority of the reported band returns were from geese banded in southern Colorado.

Literature Cited

Taylor, J. P. 1999. A plan for the management of waterfowl, sandhill cranes, and other migratory birds in the Middle Rio Grande Valley of New Mexico. U. S. Fish and Wildlife Service, Region 2. 51pp.