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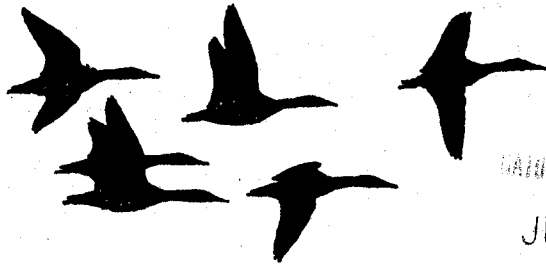
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Illinois Department of Conservation
Springfield

Division of Wildlife Resources

MIGRATORY BIRD SECTION



NATURAL HISTORY SURVEY

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THE LIBRARY OF THE CANADA GOOSE HARVEST AND HUNTER USE AT REND LAKE DURING THE 1977 SEASON

JUL 24 1978

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Abstract: An estimated 1,630 Canada geese were harvested at Rend Lake during the 1977 waterfowl season. This estimate was based on a combination of bag checks/car counts and windshield card/car counts. The in-season population peaked at 70,000 geese on December 12, 1977. This represents a 67 percent increase over the peak population during the 1976 season.

INTRODUCTION

During the 1977 waterfowl season, a survey was conducted to determine the Canada goose harvest on the Rend Lake Wildlife Management Area. This survey was initiated in 1975. Harvest data provide a measuring device for assessing waterfowl populations, migrations, habitat conditions, and success of management programs. Hunter use information is valuable in determining patterns in hunting pressure, effects of regulations, and general acceptance of public waterfowl management programs. These parameters provide a foundation on which biologists, site managers, and administrators can base future planning and development decisions.

The Rend Lake Wildlife Management Area is a cooperative project between the U.S. Corps of Engineers and the Illinois Department of Conservation. It consists of approximately 16,000 acres of land and water, and is located in Jefferson and Franklin counties.

Appreciation is due to the following Illinois Department of Conservation personnel for their participation in data collection: Site Superintendent Larry Leitner, Refuge Manager Max Newton and his staff, and wildlife biologists Jack Golden, Bill Mestel, Paul Moore, and John Slachter. This project was partially financed under the Pittman-Robertson Project W-43-R.

METHODS AND MATERIALS

Methods and techniques used for sampling the area were similar to those used in 1975 and 1976 (Hamer and Arthur 1976, Roetker 1977). These included car counts combined with bag checks, and car counts combined with windshield cards. Data were collected throughout the 70-day goose seasons in 1975 and 1976. However, in 1977 data were collected through the end of the duck season only (November 5 to December 19) due to personnel restraints. Goose hunting at Rend Lake was limited to 56 days (November 5 to December 30) in 1977. Hunter activity and harvest were estimated by extrapolation during the last 11 days of the season.

Population data were obtained by aerial inventories. These were conducted bi-weekly, weather permitting, by biologists with the Illinois Department of Conservation and the U.S. Fish & Wildlife Service.

RESULTS AND DISCUSSION

Hunter Use

The results of the 1977 survey indicated there were 8,377 hunter-trips of effort expended hunting waterfowl at Rend Lake from November 5 through December 19 (the duck season). The percentage of this effort that was devoted strictly to hunting Canada geese is unknown. However, many of the Canada geese bagged during this period were taken incidental to duck hunting activity.

However, from December 20 through December 30, a total of 3,487 hunter-trips (average of 317 per day) of effort was expended hunting geese. This hunting activity occurred primarily on the lake area, although some hunting was noted on private lands surrounding the lake. Hunter effort during a somewhat comparable period in 1976 (December 12-31) was 3,022 hunter-trips (151 per day).

Harvest

The survey indicated that 1,630 Canada geese were harvested at Rend Lake in 1977. During the previous year, 1976, the harvest was estimated to be 2,017 geese. A breakdown of the 1977 harvest suggests that 548 Canada geese were taken from November 5 to December 19. Between December 20 and December 30, a total of 332 Canada geese was harvested on the lake area. Although no actual survey was conducted on the farms surrounding the lake, it was estimated that approximately 750 Canada geese were harvested on private lands (Bill Mestel, personal communication).

Hunter Success

Because of a deficiency of data, hunter success was not calculated for Rend Lake during the 1977 goose season.

Population Status

Aerial censuses indicate that greater numbers of Canada geese were present at Rend Lake during the 1977 hunting season (70,000) than during the 1976 season (42,000). The 100,000 geese counted on January 23 and again on January 30 represented the peak in the population during the 1977-78 wintering period (Fig. 1). For purposes of comparison, the peak during the winter of 1976-77 occurred December 14 when 42,000 Canada geese were tabulated.

Conclusions

With an estimated annual harvest of 1,500-2,000 Canada geese and a continually building winter population, one can readily recognize the need for continuing a monitoring system on this area. The failure to collect data from December 20 to December 30 resulted in obvious shortcomings in the hunter activity and goose harvest estimates calculated for the 1977 season. Steps will be taken to overcome these shortcomings in the future. Rend Lake is a relatively new area that has great potential for hunting Canada geese. With this in mind it is conceivable that this area will assume greater importance in the harvest of Canada geese in southern Illinois.

LITERATURE CITED

- Hammer, V. H., and G. C. Arthur. 1976. Canada goose harvest and hunter use at Rend Lake during the 1975 season. Illinois Dept. Conservation, Migratory Bird Sect., Periodic Rpt. No. 16. 5pp.
- Roetker, F. H. 1977. Canada goose harvest and hunter use at Rend Lake during the 1976 season. Illinois Dept. Conservation, Migratory Bird Sect., Periodic Rpt. No. 18. 5pp.

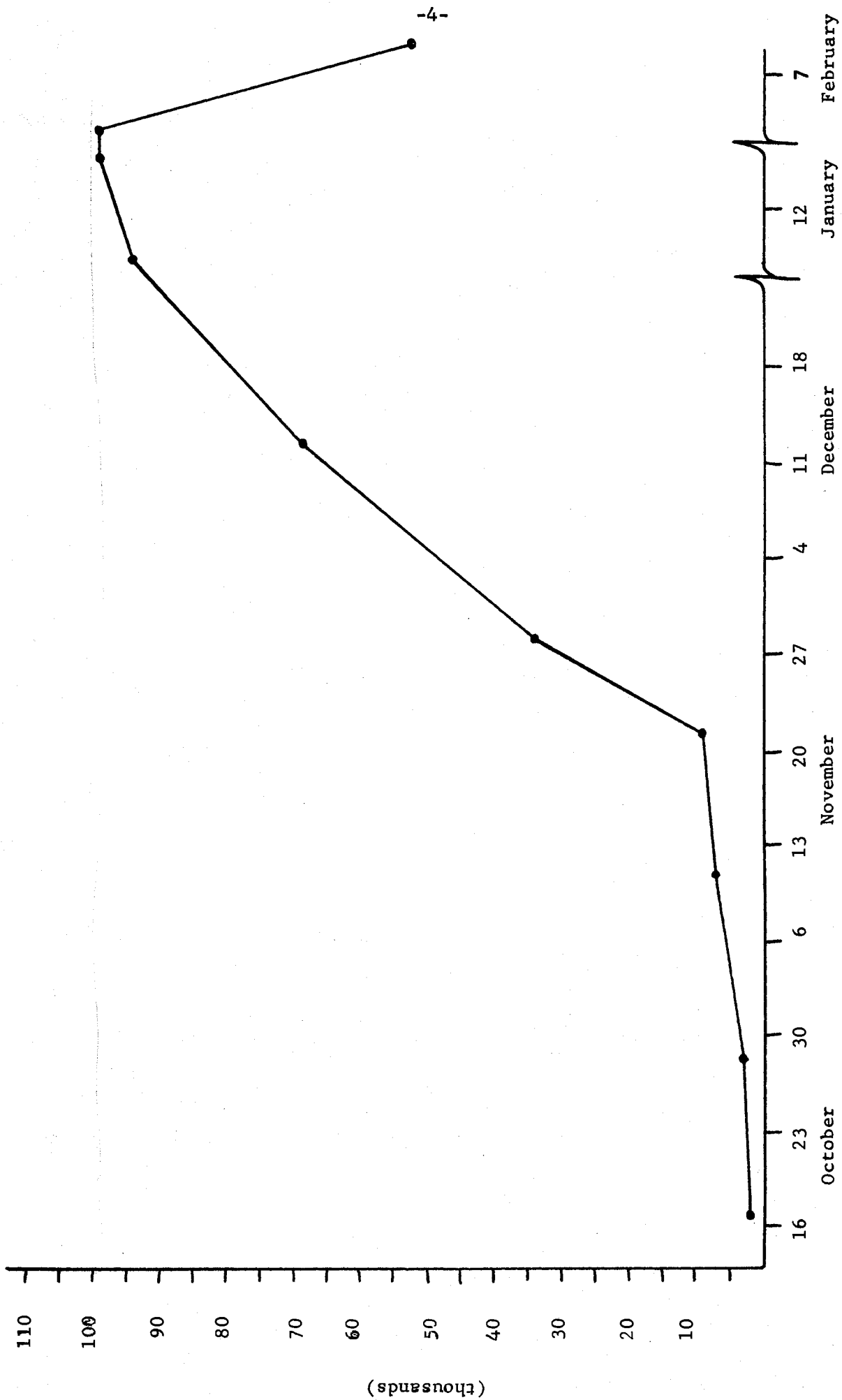


Figure 1. Numbers of Canada geese at Rend Lake during fall and winter, 1977-78.