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# Iowa's First Ruffed Grouse Hunting Season in 45 Years

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Abstract. A 16-day hunting season on ruffed grouse, the first in 45 years, was held in northeastern Iowa in 1968. Season dates were November 2 to 17, inclusive, with a daily bag limit of two and a possession limit of four birds. The 1150 hunters who took part in this season bagged 720 grouse, or 0.6 birds per hunter for the entire season. It took an average of 11.8 gun hours of hunting to bag one ruffed grouse. Birds were flushed at the rate of a bird per 1.9 hours of hunting. An average of 5.4 shots was fired per bird bagged. The sex ratio of 42 birds checked was 50:50. A ratio of 1.5 immatures per adult was found in this sample, with 60 per cent of the take thus being juvenile birds. Color phases of those birds were in the ratio of 50 red: 20 intermediate: 30 gray. Half of all grouse hunting was done in Allamakee County, with 35% in Winneshiek, 15% in Clayton and insignificant amounts in other counties. The estimated take of 720 birds represents a 6% rate of harvest of the estimated fall population of 12,000 ruffed grouse.

#### EARLY HUNTING SEASONS

The ruffed grouse, prized game bird of major importance in many states, was legal game throughout the early history of the State of Iowa. The first mention of ruffed grouse in the game laws of Iowa dates back to the Sixth General Assembly (1856-57) of the Iowa Legislature, when the first game protection law was passed. This law declared illegal the taking, except on one's own premises, of grouse (and several other species) between February 1 and July 15 each year—a period of  $5\frac{1}{2}$  months. Prior to this time there had been no restrictions on the taking of grouse, or any other game, in the territory that had only recently become the State of Iowa.

Subsequent General Assemblies periodically made slight changes in the closed season on ruffed grouse, until at the time of the Thirtieth General Assembly (1904) the open season was set at November 1 through December 15. This season of 1½-months duration remained in effect from 1904 through 1923. The Fortieth General Assembly (1923) closed the season on ruffed grouse.

The first game protection laws made no mention of bag limits. It was not until 1878 (Seventeenth General Assembly) that such restrictions were passed. At that time the killing during any one day by a single individual of more than 25 grouse was prohibited. This provision remained in effect with no change until the ruffed grouse hunting season was closed following the 1923 season.

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#### CURRENT HUNTING SEASON

A 16-day hunting season for ruffed grouse in 1968 gave Iowa sportsmen their first opportunity in 45 years to pursue this oftencalled "king of upland game birds." The open season set by the State Conservation Commission extended from November 2 through November 17. Legal shooting hours were from 8:00 AM to 4:30 PM. The daily bag limit was two, with a possession limit after the first day of four birds. Hunting was permitted only in that northeastern part of the state bounded on the west by U. S. Highway 63 and on the south by Iowa Highway 3. This area enclosed by these two major highways includes all of the current Iowa grouse range, though grouse are not found in all portions of the demarcated zone.

Two methods were used to measure the results of the 1968 Iowa ruffed grouse season. The first of these involved the contacting of hunters in the field during the season by State Conservation Commission personnel. Detailed information on many aspects of grouse hunting was obtained in this manner. The second method was used to estimate statewide grouse hunting statistics, and involved the use of a post-season statewide hunter survey. Postcard questionnaires are sent to a 2% random sample of licensed hunters each year, and it was only necessary to add ruffed grouse to the list of species covered in the survey.

Field Contacts of Ruffed Grouse Hunters. Information on actual hunter performance was obtained in varying detail from 81 party days of grouse hunting involving 172 hunters. Average party size was thus 2.1 hunters. Some hunters were contacted more than once during the season, as were some parties. Each contact on a different day was considered a separate hunting trip in arriving at the total of 81 parties contacted. These parties had hunted a total of 278 hours at the time of contact (a few were still hunting when checked), or a total of 595 gun hours. The following data were obtained from this sample of hunters.

Those hunters checked were reasonably successful in flushing grouse. There were 321 birds reported flushed during the 595 manhours of hunting. This flushing rate of 0.54 grouse per man hour (or 1.9 hours per grouse flushed) compares favorably with rates typically reported in recent years in other grouse hunting states. The average number of grouse flushed per party (including a few incomplete hunts) was 4.0. A party flushed a grouse on the average of each 52 minutes (which translates into 1 hour and 51 minutes per individual hunter).

Seventy-five grouse were bagged by this sample of hunters. Thus one grouse was reduced to possession for each 7.9 man hours of hunting (or 0.13 grouse per hour). Since 321 birds were flushed, https://scholarworks.uni.edu/pias/vol76/iss1/33

the 75 taken represent 23% of the total flushed—so just under one-fourth of the birds seen were bagged.

Data on crippling loss were available from 70 parties. They reported losing 6 crippled birds while successfully bagging 75—a rate of 1 bird lost per 12.5 bagged. This crippling rate of less than 8% would likely be a minimal estimate, however, because of the heavy cover resulting in difficulty in ascertaining whether or not a bird has been hit.

The lack of grouse hunting experience on the part of most Iowa hunters taking part in the 1968 season was well shown by the figures on number of shots fired. The 46 parties for which such information was secured fired a total of 193 shots. Of the 250 grouse flushed by these 46 parties, only 36 were bagged. Thus an average of 5.4 shots was fired to bag one bird. Performance of some parties was much poorer than this; one group of five men flushed 12 grouse, fired 20 shots and bagged only 1 bird, with no cripples lost to their knowledge!

The sex and age of 42 of the 75 birds bagged was ascertained. The overall sex ratio was exactly 50:50, with 21 birds of each sex being recorded. There were 10 adult males and 7 adult females, but 11 juvenile males compared to 14 juvenile females. However, with this small sample size, there would be little sound basis for postulating any sex ratio difference within the population. A ratio of 1.5 immatures per adult was found in the 42 birds, based on 17 adults and 25 juveniles in the available sample. Thus 60% of the sample was composed of young birds.

Color phase was recorded for 38 grouse, with a final tally of 19 red phase, 8 intermediate, and 11 gray phase (ratio of 50:20:30 out of 100). No trend toward one color phase predominating in a given area could be discerned.

Statewide Hunter Post-season Survey. The hunter postcard questionnaire survey made after the hunting season was originally designed primarily for pheasants. Hence the 2% random sample of licensed hunters drawn is smaller than desired for some of the minor species, including ruffed grouse in 1968. Nevertheless, this must serve as the source for determining what transpired during the 1968 season in the open grouse hunting zone.

This "best estimate" indicated that 1150 hunters took part in the grouse season (0.4% of all licensed Iowa hunters in 1968). They harvested a total of 720 ruffed grouse, or 0.6 grouse bagged per hunter for the entire 16-day season (Table 1). Grouse hunting in 1968 provided about 8500 man-hours of recreation involving over 2000 hunting trips (days).

It was readily evident that the ruffed grouse season provided much recreation in relationship to the number of grouse bagged.

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The 11.8 hours of hunting required to bag one bird far exceeds the usual rate for other small game, which in Iowa in recent years has varied from about 1.5 to 4.5 hours per individual pheasant, quail, rabbit and squirrel bagged. Since few of the hunters afield during the grouse season had any previous experience with such difficult targets, the low rate of return for the effort invested is not surprising. The estimated take of 720 birds represents only a 6% rate of harvest of the estimated fall population of 12,000 ruffed grouse in northeastern Iowa.

The rate of success shown by the statewide survey was less than that found during the hunter field contacts—11.8 hours to bag a bird vs 7.9 hours from the field contacts, or 0.08 bird per man hours vs 0.13. However, the majority of the field contacts were made early in the season and these were biased in favor of the territory around, and including, the Yellow River State Forest in Southeastern Allamakee County and that along North and South Bear Creeks in northeastern Winneshiek County—two of the best grouse areas.

The hunter survey also provided a crude measure of the distribution, by county, of grouse hunting effort, and of the county of residence of grouse hunters. On this basis, about 50% all grouse hunting effort took place in Allamakee County, with 35% in Winneshiek County and 15% in Clayton County; there was apparently no significant amount of hunting in surrounding counties on the fringe of the grouse range. Seventy-five per cent of the grouse hunt-

Table 1

Ruffed Grouse Hunting Season Results, Iowa, 1968, as Determined by Post-season Hunter Survey.

Item	Statistic
Number of ruffed grouse bagged	720
Number of hunters pursuing grouse	1150
Percentage of all Iowa hunters after grouse	0.4%
Total hunting trips (days) for grouse	2070
Total hours hunting for grouse	8510
Average number of grouse bagged per hunter during season	0.6
Average number of grouse bagged per hunter per trip (day)	0.3
Average number of grouse bagged per hunter per hour	0.08
Average number of hours needed to bag one grouse	11.8
Average number of trips (days) per hunter during season	1.8
Average number of hours per hunter during season	7.4
Average number of hours per hunter per trip (day)	4.1

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ing was done by residents of the open hunting zone for grouse, with the other 25% of the hunters coming from elsewhere in the state.

#### Discussion

Since the ruffed grouse is restricted to limited areas in the northeastern corner of Iowa, and consequently will never be in abundant supply in the state, hunters will likely treat them as more of a "trophy" bird than, for example, pheasants or quail. Iowa does not have enough remaining suitable forest area for grouse for the species to achieve any importance so far as sheer numbers are concerned. However, as long as a harvestable surplus exists and a season can be set to allow hunters an opportunity at this portion of the population without endangering the maintenance of adequate breeding stock, Iowa sportsmen can have a chance to try their luck at a target regarded by many as the "king of upland game birds"—the ruffed grouse.