MOVEMENT AND SEASONAL HABITAT OF RUFFED GROUSE ON THE UNIVERSITY OF IDAHO EXPERIMENTAL FOREST

A Thesis

Presented in Partial Fulfillment of the Requirements for the

Degree of Master of Science in Forestry

Major in Wildlife Management

In the

University of Idaho Graduate School

By

David Lee Erickson

1961

Summary and Conclusions

A study of the seasonal habitat and movements of ruffed grouse was carried on during the period of June, 1959 to June, 1960. The site of investigation was an area of cut-over forest on the Flat Creek Block of the University of Idaho Experimental Forest, Latah County, Idaho.

During late June and early July, ruffed grouse were found in both the Cedar-hemlock and Douglas fir zones. As the summer advanced, broods moved to the ravines during the day. Logging roads and railroad grades were used as evening feeding areas from about midaugust until at least mid-November.

In the summer and fall of 1959, twenty-four grouse were banded. Six out of twenty grouse killed during the hunting season on the Flat Creek area were banded. The total kill represented about 13 percent of the fall population on the area. The banded juvenile grouse moved a maximum distance of 0.29 miles and a minimum distance of 0.04 miles in fall dispersal. The short period of time from the date of banding to the date the bird was killed or observed suggested that the dispersal distances were minimized. Although sufficient data are lacking, juvenile females moved farther than males. In addition, there was a tendency of the birds to move in a southerly direction up the major drainage system of the area.

Grouse were found using the spur ridges, slopes, and ravines for their winter habitat. Very few birds were found wintering on the main <u>Abies grandis/Pachistima</u> habitat types. Grouse found on all aspects during the winter. The winter concluded that the wintering habitat of grouse overlapped the summer brood habitat in 1960.

The habitat of the drumming males was on the spur ridges and slopes as opposed to the more extensive winter habitat. The cover in the <u>Abies grandis/Pachistima</u> habitat type was preferred by male grouse, although the use of more than one habitat type was indicated. Males showed no preferences for one aspect over others. Cocks selected large,

rotten, moss-covered logs for drumming, and they commonly used more than one log during the drumming season.

Thirty-eight drumming males were located on the Flat Creek area. A spring density of 5.4 drumming males per hundred acres was estimated for the area. Fifteen males were captured with mirror-traps and marked. The age composition of the trapped cocks consisted of about twice as many juveniles (one-year-olds) as adults (two years or older). Although the sample size is small, these data indicated that the ruffed grouse population on the Flat Creek area is reproducing well.

Study Site

The study site is located in the Flat Creek area, about 15 miles south of Harvard, Idaho. It is known as the Thatuna Range, a wide expanse of undulating hills extending westward through the region (Faick, 1937). These hills rise from one to three thousand feet above the surrounding country, which is a plateau lying at 2,500 feet above sea level (Tullis, 1932). The Flat Creek weather station is located in the bottom of the main drainage at 2,900 feet above sea level. The adjacent main ridges rise one hundred to two hundred feet above this elevation.

Township is 40 and 41 north, Range 3 west, of the Boise Meridian. And is twenty-five miles northeast of Moscow, Idaho. State highway 7, a road between Harvard and Deary, Idaho, passes through the area.



Flat Creek

Location of Complete Research:

Author & Title: Erickson, David Lee <u>Movement and Seasonal Habitat of Ruffed Grouse on the</u> <u>University of Idaho Experimental Forest</u> University of Idaho Library: Call Number-QL696.G285E7

College of Natural Resources:

Department-Wildlife

Other Sources:

171