



The National Wild Pheasant Conservation Plan

Key Literature:

Effects of male territory habitat on pheasant abundance and demographics

Last Updated: December 18, 2016

Note: The literature cited below represents a subset of the information used when making pheasant management decisions related to this topic. It is intended to provide a general sense of the primary research available on the subject, but is not comprehensive. Other information on the topic may also be available in books and technical bulletins that do not lend themselves well to this form of summarization. The list will be periodically updated upon request by National Wild Pheasant Technical Committee members.

4. Habitat Effects on Abundance and Demographics

h) Male territory cover

Leif, A. P. 2005. Spatial ecology and habitat selection of breeding male pheasants. Wildlife Society Bulletin 33:130-141.

Abstract: In contrast to the management of European pheasants (*Phasianus* spp.), the spatial dynamics and habitat selection of breeding male ring-necked pheasants (*P. colchicus*) have received little attention in North America. To evaluate these parameters, I radiomarked 95 male pheasants over 5 years (1997-2001) on 2 study areas in eastern South Dakota. In spring 73% of radiomarked pheasants dispersed and moved an average of 3.2 ± 0.3 km (SE) from wintering sites. Home range sizes of breeding male pheasants were bimodally distributed. One group of male pheasants exhibited localized movements and had relatively small (18.4 ± 0.9 ha) home ranges, whereas a second group was intermittently sedentary and mobile and had relatively large (45.4 ± 2.9 ha) home ranges. Males preferred to establish breeding home ranges in association with idled herbaceous and woody cover. The proportional abundance of woody cover decreased the size of male home ranges, whereas higher proportions of cropland resulted in larger pheasant home ranges. Within home ranges male pheasants preferred woody cover to other available habitats. While subjugated males assumed sedentary, submissive roles in Europe, in South Dakota males sought unoccupied spaces on landscapes to establish territories. Complexes of idled herbaceous and woody cover will maximize the capacity of landscapes to support male pheasant territories.

Robertson, P. A. 1996. Does nesting cover limit abundance of ring-necked pheasants in North America? Wildlife Society Bulletin 24:98-106.

Abstract: I examined the hypothesis that availability of suitable nesting cover is a major limiting factor for North American pheasant (*Phasianus colchicus*) populations. North American technical publications about pheasant nesting for 1933-1990 were reviewed and categorized to 8 habitat types and 3

methods of nest detection. I extracted comparable variables for available habitat, nesting, and hatching. Occurrence of pheasant nests in different habitats relative to habitat availability differed among methods used to locate nests. High-and low-density pheasant populations did not differ in proportion of nests in different habitats or proportion of successful nests among habitats. Analyses did not support the hypothesis examined. An alternative hypothesis of territory cover as a limiting factor is discussed.