The National Wild Pheasant Conservation Plan

Key Literature:
Large-scale historical perspectives on pheasant management, 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.

Allen, D. 1950. Problems and needs in pheasant research. Journal of Wildlife Management 14:105-114.

Abstract: This review of the pheasant program probably can serve as a critique of wildlife investigations in general. In no other field of science have we taken research so lightly. Basically, this probably is an important reason for evidences of amateurism, inattention to fundamentals, and the want of a sound management philosophy. Immaturity can, perhaps, only be cured with time; but the process surely will be speeded by facing the issues and going to work on them.

Berner, A. H. 1988. Federal pheasants – impact of federal agricultural programs on pheasant habitat, 1934-1985. Pages 45-93 *in* D. L. Hallett, W. R. Edwards, and G. V. Burger (eds.), Pheasants: symptoms of wildlife problems on agricultural lands. North Central Section of the Wildlife Society, Bloomington, IN, 345 pp.

Abstract: Federal agricultural programs designed to assist farmers economically (e.g., cropland diversion and crop deficiency payment programs), and to increase production and establish conservation practices (e.g., cost-share programs, small watershed [P.L. 83-566] projects) have significantly impacted the amount and quality of pheasant habitat over the last half century. The bulk of these programs have caused destruction of existing habitats (e.g., cost-shared drainage) and creation of large amounts of unsafe wildlife habitat (e.g., annual commodity programs). Wildlife species highly dependent on grassland and wetland habitats, such as the pheasant, have been most negatively affected. Pheasants have responded positively to multi-year cropland diversion programs (e.g., Soil Bank), but negatively to annual cropland set-aside programs that allow poor cover management and require periodic disturbance (e.g., 1986 and 1987 Feed Grain and Wheat Programs).

Burger, G. V. 1988. 100 years of ringnecks: an historical perspective on pheasants in North America. Pages 1-26 *in* D. L. Hallett, W. R. Edwards, and G. V. Burger (eds.), Pheasants: symptoms of wildlife problems on agricultural lands. North Central Section of the Wildlife Society, Bloomington, IN, 345 pp.

Abstract: This paper presents a chronological review of problems and accomplishments in pheasant research and management in North America over the past 100 years. Pheasants epitomize the term "farm game." They thrive best on fertile soils in areas of mixed farming managed at moderate intensity. Today, over much of their range, pheasant are greatly reduced in numbers compared with 50, 30, or even 10 years ago. They stand as symptoms of wildlife problems on agricultural lands. The roots of current problems of pheasant and other wildlife on agricultural lands are seen to lie in socioeconomics, agricultural technology, and intensive land use. The problem is thus and agricultural problem and demand an agricultural solution. The solution thus must go well beyond the bounds of traditional wildlife management. Of prime concern is the design of federal agriculture programs as they affect land use and, thus, habitat, and the local implementation of such programs, particularly cropland diversion. The solution is in wildlife professionals acting in partnership with an informed and growing citizen constituency.

Labisky, R. F. 1976. Midwest pheasant abundance declines. Wildlife Society Bulletin 4:182-183.

Abstract: The 19th Annual Meeting of the Midwest Pheasant Council, a technical advisory body of the Midwest Association of Fish and Wildlife Commissioners (MAFWC) was held 5-8 April 1976 at Wisconsin's DNR new MacKenzie Environmental Education Center, Poynette. Fifty-four registered participants, representing 15 states and 1 province, were in attendance. A review of trends in population abundance between 1970 and 1975 in the 14 member states was not encouraging. Declines (some severe) in abundance have occurred in Colorado, Illinois, Indiana, Iowa, Kansas, Nebraska, Ohio, Pennsylvania, and South Dakota. Abundance levels were maintained in Minnesota, Missouri, North Dakota, and Wisconsin. Gains in abundance occurred only in Michigan. In this light, the Midwest Pheasant Council unanimously resolved to recommend that the parent MAFWC sponsor the preparation of a "white paper" that will document the loss of habitat for pheasants (and other wildlife) throughout the agricultural community of the Midwest. This documentation will provide the statistical basis for launching a forceful educational campaign that will alert the public and our legislators to the critical need for land management programs that will benefit wildlife, soil, and water resources.

Riley, T. Z., and S. P. Riley. 1999. Temporal comparison of pheasant brood sizes in the Midwest. Wildlife Society Bulletin 27:366-373.

Abstract: Ring-necked pheasant (*Phasianus colchicus*) populations have been surveyed extensively throughout the Midwest for several decades. For pheasants, mean brood size provides a measure of annual recruitment. Regressing mean brood size on year from population surveys conducted in 9 Midwestern states and 25 regions within 5 states, we found that mean brood size increased on surveys in Nebraska (P<0.001) and declined in Illinois (P<0.001), Minnesota (P=0.004), North Dakota (P=0.001), South Dakota (P=0.01), and Wisconsin (P<0.001). Mean brood size increased on surveys in 6 of 6 regions in Nebraska (P<0.057) and declined in 1 of 5 regions in Iowa (P<0.022), 2 of 5 regions in Kansas (P<0.045), 2 of 6 regions in Minnesota (P<0.058), and 1 of 3 regions in North Dakota (P=0.008).

Averaging mean brood size among 10 year survey intervals, we found that the change in mean brood size occurred more specifically between 1956 and 1965 and 1976 and 1985 in Illinois (P<0.001), 1962 and 1971 and 1972 and 1981 in Iowa (P<0.001), 1960 and 1969 and 1980 and 1989 in Minnesota (P=0.048), 1969 and 1978 and 1979 and 1988 in Nebraska (P<0.001), 1972 and 1981 and 1982 and 1991 in North Dakota (P=0.065), and 1956 and 1965 and 1987 and 1996 in Wisconsin (P=0.001). We recommend standardization of techniques to monitor pheasant broods throughout the Midwest with greater documentation of environmental changes.