



The National Wild Pheasant Conservation Plan

Key Literature:
Uses of pen-raised pheasants

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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.

12. Uses of Pen-raised Pheasants

Diefenbach, D. R., C. F. Riegner, and T. S. Hardisky. 2000. Harvest and reporting rates of game-farm ring-necked pheasants. *Wildlife Society Bulletin* 28:1050-1059.

Abstract: Many state natural resource agencies release ring-necked pheasants (*Phasianus colchicus*) for hunting, but the effectiveness of these programs has never been evaluated on a statewide basis. We conducted a reward-band study to estimate harvest, reporting, and survival rates of pheasants raised and released by the Pennsylvania Game Commission (PGC) for the fall 1998 hunting season. We banded 6,770 of 199,613 released pheasants with leg bands worth \$0-\$400. Rewards >\$75 produced 100% reporting rates. Hunters reported 71.0% of harvested pheasants banded with standard bands (no reward). Cocks had an estimated 62.3% harvest rate when released on public land and a 46.8% harvest rate on private land. Hens had an estimated 50.4% harvest rate when released on public land and a 31.1% harvest rate on private land. Estimated harvest rate for hen pheasants released in September in the either-sex zone was 15.5%. In the late season, pheasants released on public land had a 33.6% harvest rate and a 23.5% harvest rate on private land. We found that few pheasants (<6%) survived >30 days and birds released on public land had reduced survival rates primarily because of greater harvest rates. In fiscal year 1998-99, the net cost to raise and release 199,613 pheasants was \$2,813,138 (\$14.09 per bird). The average cost per harvested pheasant was \$29.10, but ranged from \$22.63 to \$90.74 depending on the date and location of release. We estimated that 49.9% (82,017 birds) of pheasants stocked immediately prior to and during the regular and late seasons (excluding September releases of hens) were harvested by hunters. Percentage of pheasants harvested by hunters could be increased by expanding the either-sex zone in Pennsylvania so that more hens could be legally killed by hunters and by allocating releases to seasons and locations with greater harvest rates. However, before such changes are implemented, we recommend a survey of Pennsylvania pheasant hunters to ascertain their opinions and desires regarding releases of game-farm pheasants.

Leif, A. P. 1994. Survival and reproduction of wild and pen-reared ring-necked pheasant hens. *Journal of Wildlife Management* 58:501-506.

Abstract: Pen-reared ring-necked pheasant (*Phasianus colchicus*) hens are commonly released by private managers to augment wild pheasant populations in South Dakota. To evaluate this practice, I radiomarked wild ($n = 44$) and pen-reared ($n = 159$) ring-necked pheasant hens to monitor their survival and reproduction in 2 study areas in eastern South Dakota, 1990-92. Survival of pen-reared hens ($7.8 \pm 2.4\%$ SE) was lower ($P < 0.001$) than that of wild hens ($54.6 \pm 6.6\%$) during the 181-day reproductive period because of higher ($P < 0.001$) predation ($90.3 \pm 2.9\%$ and $45.4 \pm 6.6\%$, respectively). Fewer ($P < 0.001$) pen-reared (21%) initiated nest incubation than did wild pheasants (68%). Surviving pen-reared hens (38%) were less ($P = 0.03$) successful in nesting than were wild hens (63%), but brood-rearing success did not differ ($P = 0.17$) with treatment (56 and 83%, respectively). Wild hens recruited 34 broods/100 hens compared with 3 broods/100 hens for pen-reared hens. Because of low survival and reproductive rates, pen-reared hens should not be released in habitats containing wild pheasants.

Schulz, J. H., J. J. Millsbaugh, D. T. Zekor, and B. E. Washburn. 2003. Enhancing sport-hunting opportunities for urbanites. Wildlife Society Bulletin 31:565-573.

Abstract: Recent declines in recreational sport-hunting participation rates result from a variety of societal and cultural changes as well as extensive changes in the distribution of the United States population. Concurrently, natural-resource agencies are undergoing broad changes in focus and goals, with holistic ecosystem management competing with traditional game management for limited financial resources. We believe that recreational hunting is an important cultural element that should remain a mainstream recreational activity and should continue to have a significant place in natural-resource agencies. Given the transition of the United States population to a more urbanized society, new innovative programs need to be developed to recruit and retain recreational sport hunters from urban population centers that provide "successful" hunting experiences. We identify several components that will be essential to the success of these programs, such as providing a reasonable expectation of success or accomplishment (e.g., harvesting an animal), providing sport-hunting opportunities near urban population centers, and providing opportunities that are sensitive to the needs of diverse groups (e.g., minority, gender). We propose 2 solutions for providing recreational hunting opportunities to residents of urban areas: 1) establishing crop fields to attract mourning doves (*Zenaida macroura*) and 2) implementing put-and-take hunting under certain restrictions. We recognize many possible problems with these suggested programs. Natural-resource professionals have strong opinions about these issues, but we believe discussions are needed if hunting is to remain a mainstream recreational activity. These dialogues need to 1) address the role of recreational hunting in resource agency policies and programs, 2) identify innovative programs to educate, introduce, and retain urban residents in recreational hunting, and 3) identify innovative programs to provide urban hunters with experiences similar to those we have proposed. If we fail to recognize the emerging societal, cultural, and professional changes impacting sport-hunting participation rates, this activity likely will become an anachronism.