



No.	Author	Date
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	Title 2006 Spring Ring-necked Pheasant Crowing Count Survey	

Abstract: Among four primary northwest Indiana crowing count routes surveyed annually, the number of roosters heard remained relatively unchanged between the spring 2005 and spring 2006 surveys. An average of 1.15 crowing pheasants were heard per stop during the spring 2006 survey while an average of 1.20 roosters was heard/stop in 2005. The 2006 count average of 1.15 was 24% lower than the 10-year average of 1.52 roosters/stop and 64% below the long-term average of 3.16, but only the long-term average was significantly greater ($P=0.002$). Every five years, 15 crowing count routes are surveyed. In 2006, this expanded count yielded an average of 0.65 roosters/stop. This average was slightly higher than the previous expanded survey in 2001. However, the 2006 count average of 0.65 was still significantly lower than both the 10-year (-24% ; 1.52 roosters/stop) and the long-term (-64% ; 1.83 roosters/stop) average ($P=0.027$ and 0.001 , respectively). **Work Plan: # 204257**

The colorful ring-necked pheasant is a well-known game bird of Indiana and the Midwest. This naturalized, yet embraced species was introduced from Asia to California in 1857, and Indiana became involved in stocking ring-necked pheasants around 1900. After finding a niche in the agricultural land of Northern and Central Indiana, the ring-necked pheasant has remained a sought after upland game species by Hoosier hunters. As with many other Indiana species, annual research is conducted on the ring-necked pheasant. The information that is gathered from this research is used to set forth management priorities and harvest regulations in coming years.

Methods

Since 1976, The Indiana Division of Fish and Wildlife has conducted an annual ring-necked pheasant crowing count to determine a spring male population index. The annual survey is conducted along four road routes in Benton and Newton counties. Every five years, eleven additional road routes are surveyed for crowing pheasants. These additional routes have been surveyed periodically since 1976 and were again surveyed in 2006. All routes combined were completed between May 3rd and May 10th. Observers recorded the number of roosters (male pheasants) heard during a 2-minute period at 20

stops spaced at 1-mile intervals along each route. Counts were started 30 minutes before sunrise and were not conducted during inclement weather.

Results

In 2006, a total of 92 roosters were heard at 80 stops (1.15 roosters/stop) along the four annual survey routes. The 2006 count was less than (-4%) the 1.20 roosters/stop of the 2005 count, but was not significant ($P=0.454$). The 1.15 roosters/stop in 2006 was also not significantly below (-24%) the 10-year average of 1.52 roosters/stop ($P=0.219$); however, the 2006 count was 64% lower than the long-term (30 years) average of 3.16 roosters/stop ($P=0.002$). Additionally in 2006, eleven other routes were surveyed throughout Indiana's ring-necked pheasant range. The 15 routes that made up the 2006 count recorded 192 roosters and showed an average of 0.65 roosters/stop. This average was 15% greater than the 0.55 roosters/stop result of the 2001 expanded pheasant count, but was not significant ($P=0.30$). However, the 0.65 roosters/stop in 2006 was significantly lower than the 10-year average of 1.52 roosters/stop (-44% ; $P=0.027$) and the long-term (30 years) average of 1.83 roosters/stop (-64% ; $P=0.001$).



Discussion

The substantial long-term decline in Indiana's ring-necked pheasant population is due to the loss of suitable habitat for nesting and raising young. Currently, little more than 250,000 acres of farmland are idle across the state. This equates to more than a 90% loss of potential game bird habitat when compared to the late 1960's and early 1970's. Because much of this habitat has been swallowed up by urban and suburban development, Indiana's pheasant population will likely never again resemble the number of birds that existed during the "glory days" of 40 years ago. This huge loss of habitat has also devastated Indiana's quail and rabbit populations.

However, Indiana landowners can take advantage of some federal programs including the Continuous Conservation Reserve Program (CCRP) administered by the USDA Farm Service Agency. There are 2 CCRP practices in particular that are available to Indiana landowners and can create a noticeable benefit for Indiana's upland game: 1) CP-21 – filter strips, and 2) CP-33 – upland wildlife buffers. These buffer strips provide essential nesting cover for pheasants and other game birds while lessening erosion and improving water quality. For more information about these and other federal programs, contact your local USDA service center.

The Indiana Division of Fish and Wildlife also has programs that can provide landowners with support and funds to establish and/or maintain game bird habitat. These programs include the [Wildlife Habitat Cost-Share Program](#), the [Game Bird Habitat Development Program](#), and in designated pheasant priority areas, the [Pheasant Habitat Incentive Program](#). For additional information about these IDFW programs, contact your local district biologist or visit: <http://www.in.gov/dnr/fishwild/hunt/aid.htm>.

One simple tip landowners can use to substantially improve conditions for upland game on their land is to simply wait as long as possible to mow waterways and ditch banks (preferably after mid-August). This will provide safe cover for hen pheasants to nest and raise their young.

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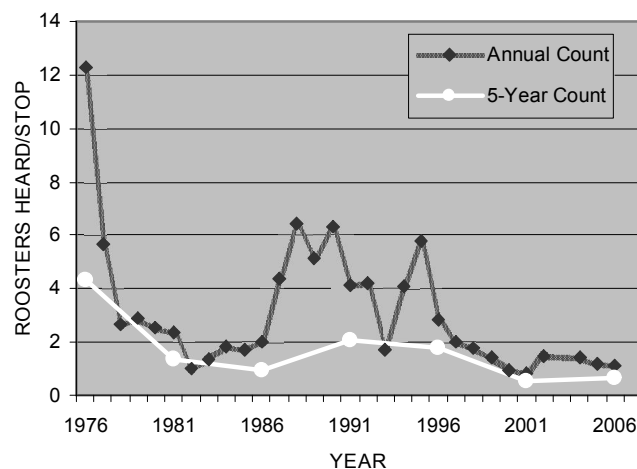


Figure 1: The average number of ring-necked pheasants heard crowing at each stop along 4 routes of the annual pheasant crowing count surveyed in Newton and Benton County (black line) and along 15 routes of an expanded count (white line) located throughout Indiana's pheasant range and conducted every 5 years between 1976-2006. Prior to 2006, the crowing count run at 5-year intervals was last surveyed in 2001.