

Saturday morning, October 26, 1968, 8:30 a.m., opening day of small game season:

But instead of preparing to head afield that morning, I was on my way to school to take the College PSAT exam. Didn't matter that the test had been scheduled on one of the most important dates on the outdoor calendar: My mother insisted that I take the exam. All the way into town we passed legions of cars and trucks filled with red and blaze orange clad hunters, headed for the farm country I had just left, to hunt rabbits and pheasants.

To this day I don't know how I got through that morning and managed to do well on the test. My mind was focused on one thing, getting home and bagging a pheasant with my brand new Remington 870. My torment was relieved within two hours of arriving home that afternoon. I not only flushed several birds, but managed to bag my very first cockbird. Its longest tail feather, matched with a pair of '60s-era Game News, hang framed on my office wall as lasting mementos of that special day long ago. The enthusiasm Pennsylvania sportsmen had for pheasant hunting back then is beyond imagination. Vehicles lined farm country roads throughout southern Pennsylvania, and ranks of bird hunters could be seen strung out across cornfields. – Keith Sanford

Wild Pheasants Welcomed Back

By LMO Keith Sanford and PGC Wildlife Biologists Colleen DeLong and Larry Crespo

BY THE MID-1970s, however, pheasant populations and harvests had begun to decline in Pennsylvania and all other eastern states, and by the early '90s they had all but disappeared, victims of a "perfect storm." The perfect storm was a combination of factors: Farming practices changed dramatically by the mid-1970s. The Soil Bank (1956-66) and Feed Grain Programs (1960s to 1973) that had idled 500,000 acres in Pennsylvania were discontinued. And as a result, much of this land that had been planted in timothy and clover, a preferred nesting cover for pheasants, was put back into production, leading to a loss of safe nesting habitat for pheasants. What had been a landscape of small farms with idle fields and hedgerows became large fields farmed from one forested edge to the next. Other "storm" factors were increased pesticide use and early hay mowing, which tends to destroy nests. Then, during this same time, urban sprawl deeply invaded our farmlands, consuming grassland bird habitat along its way.

It was a personal love of the sport and the continued interest in pheasant hunting by multitudes of hunters that inspired Pheasants Forever chapters, volunteers and wildlife professionals to pursue a recovery of this great game bird. Thanks to the partnership formed between the PGC and Pheasants Forever (PF), wild pheasants may once again have a significant presence on part of the landscape in a few select areas of the state.

The Ring-necked Pheasant Management Plan, 2008-2017 calls for restoring sustainable, huntable populations in suitable habitat by establishing Wild Pheasant Recovery Areas (WPRAs). The key is to start with suitable habitat of sufficient size and quality, then accelerate the rate of pheasant expansion through the release of wild birds. Habitat first, then birds follow.

Returning secure nesting cover is essential for wild pheasant restoration. In 2000, USDA's Conservation Reserve Enhancement Program (CREP) gave farmers the opportunity to do this again. Fields enrolled in CREP provide grassy nesting and brood rearing cover as well as brushy winter cover, adjacent to grain fields — the right combination of habitat components needed by pheasants.

Without large-scale conservation programs such as CREP, wild pheasant recovery efforts could not even be attempted. We must also manage for pheasants, and other farmland wildlife, over large landscapes. One or two farms with good habitat is not enough. That's

why CREP is they key: it has added thousands of acres of secure nesting cover for pheasants to agricultural landscapes in Pennsylvania.

As prescribed in the pheasant management plan, the minimum acreage for a WPRAs is 10,000 acres, and the pheasant habitat model developed along with the management plan calls for areas that have more than 50% cropland, more than 20% grasses (including hay, pasture and small grains), less than 20% forest, and less than 10% developed land. Also, at least 8% of the area must be in secure nesting cover provided predominantly by CREP fields.

Through a trap-and-transfer program that began in 2005, wild pheasants from South Dakota and Montana have been released in three areas: Pike Run WPRAs in Washington County; Central Susque-hanna WPRAs in Northumberland, Montour and Columbia counties; and Somerset WPRAs in Somerset county. A fourth area, the Hegins-Gratz WPRAs, in Schuylkill and Dauphin counties, was approved this past June.

The first three WPRAs were established in cooperation with PF before the pheasant management plan was completed and the size and habitat criteria were developed. They were approved as WPRAs at that time to protect wild birds that had already been released. These areas do not all meet the habitat criteria prescribed in the pheasant management plan, and time will tell if they are suitable for establishing pheasant populations. The Hegins-Gratz Valley WPRAs was established according to the size and habitat criteria in the pheasant management plan, and the first release of wild pheasant in this new WPRAs is planned for winter 2011.

Because hens are the key to building a sustainable population, spring hen density is considered the defining measure of success. PGC pheasant biologist Scott Klinger explains, "Thanks to research by PGC biologist Fred Hartman during the early 1970s, we know that spring hen pheasant densities were 40-120 hens/mi² in primary pheasant range, 10-39 hens/mi² in secondary range, and 0-9 hens/mi² in tertiary range. Based on the habitat available in Pennsylvania now, the pheasant management plan calls for spring hen densities of 10 hens/mi² over a 6-year monitoring period to consider a wild pheasant population in a WPRAs to be sustainable."

When the first WPRAs got started, landowners posted their properties against hunting and dog training during the nesting season, and the Game Commission stopped releasing game farm birds in the areas. After the Game Commission designated the existing projects as WPRAs, the following regulations were established:

- It is unlawful to release pen-raised pheasants anytime within any area designated as a WPRAs.
- It is unlawful to train dogs in any manner or hunt small game from the first Sunday in February through July 31 within any area designated as a WPRAs.
- There is no open season for the taking of pheasants in any area designated as a WPRAs.

Roads are used as WPRAs boundaries so hunters, landowners, WCOs and others can easily tell where regulations protecting these wild birds are in effect.

Severe winter weather, heavy spring rains, nest depredation, and mortality due to mowing and hay making are factors that we have no or little control over. However, hunting, the release of pen-raised birds, and disturbance during the release period and nesting season are factors we can control. Even in suitable habitat, protecting these birds during the winter months and throughout the nesting and brood rearing season is critical to the establishment of a new population.

Wild pheasants for WPRAs are trapped in western states and transferred to WPRAs in February each year. "Working with local trappers is vital to obtaining wild pheasants," said Jesse Putnam, a biologist with Habitat Forever, a Pheasants Forever Company, "and trapping must be conducted in cold, snowy conditions. If the winter is mild, trapping is not as successful." Putnam and his trapping team have endured extreme winter weather while trapping pheasants for Pennsylvania's WPRAs.

The trappers place the birds in holding facilities designed to keep them safe and healthy until their ride to Pennsylvania, and before transport, the birds receive a clean bill of health from veterinarians. "It's amazing how healthy these birds are when they arrive here. The trappers take great care of the birds. We couldn't ask for better people out west," said Shon Robbins, Pheasant Forever's Regional Biologist. A minimum of 300 wild pheasants have been, or will be, released each February for three years in each WPRAs. Pike Run releases began in 2005, Central Susquehanna releases began in 2007, and Somerset's first release took place in 2009. If all goes well this winter, the Hegin-Gratz Valley WPRAs is slated for its first release then.

Once in Pennsylvania, pheasant releases take place immediately before dawn, when the darkness helps to keep the birds calm, so they come out of the boxes slowly and stay in a group. The crates are placed facing good cover, such as shrubby thickets or thick native grasses. Volunteers quietly open one end of each box and then walk away and wait in the truck. Some of the birds walk out of the boxes together, and some will begin to fly short distances as daylight approaches.

Following a release, PGC and PF biologists and volunteers begin monitoring the radio-collared hens to determine survival. Annual hen survival of 30% or more is needed for a population to grow and stabilize. Crowing counts are used to determine annual densities and long-term trends in rooster numbers.

Brood surveys confirm reproduction and provide location, size and age of broods. Most of the brood data are provided by landowners and community members, and average brood sizes can tell us if pheasant reproduction in our WPRAs is consistent with other sustainable populations studied in the past. Additional reports of wild pheasant sightings throughout the year provide dispersal data and information on large flocks of pheasants.

Volunteers with bird dogs conduct flushing surveys in late winter to determine pre-nesting season sex ratios, and a ratio of at least 1:1 is needed for the population to be able to grow. Flushing survey sample sizes are also important. Because bigger sample sizes provide the most accurate picture of the sex ratio, the volunteers (and dogs), who help survey large areas of habitat, are very important.

Spring hen density in the Pike Run WPRAs increased from 2 to 3 hens/mi² from 2009 to 2010. In the Central Susquehanna WPRAs's Turbotville-PPL study area from 2008 to 2010, hen density increased from 3 to 6 to 9 hens/mi². In the Central Susquehanna WPRAs's Greenwood Valley study area, hen density fluctuated from 2 to 4 to 2 hens/mi² from 2008 to 2010. In 2010 in the Somerset WPRAs, hen density was 1 hen/mi².

It is important to continue monitoring for six years, as longer trends will better tell us whether the populations are increasing, decreasing or staying the same over time. More details from wild pheasant monitoring are also available in the Wild Pheasant Recovery Area Annual Report for 2010, available at the Game Commission website.

At this time the Turbotville-PPL study area in the Central Susquehanna WPRAs is showing considerable promise in reaching 10 hens/mi² within the 6-year monitoring period. Pike Run and Greenwood Valley are not doing as well. While it is too early to know how the wild pheasant population will do in the Somerset WPRAs, another release year and continued monitoring will provide more information.

While pheasants are not doing as well as hoped for in some of the early WPRAs, we have learned that using the habitat model from the pheasant management plan to select appropriate WPRAs sites is critical. Since the completion of the pheasant management plan and the development of the habitat model, approval of all proposed WPRAs sites is based on whether or not the existing habitat components fit the habitat model. We are optimistic that WPRAs with suitable habitat and size can give wild pheasants a chance at making a comeback in select areas of the state. WPRAs sites must provide a sufficient level of secure nesting habitat, and habitat improvements should be made continually to ensure future

pheasant habitat. Ultimately, the right combination of suitable habitat components in a farmland landscape is the key to success for wild pheasant populations.