



Pennsylvania Game Commission Annual Report, 2007-08

2007-08

THE Game Commission is proud to present this 2007-08 annual report. While not as entertaining as many of the stories that grace this magazine's pages over the course of a year, this report provides a detailed accounting of what the Game Commission has done over the past fiscal year, from the latest in wildlife research and habitat management, to law enforcement activities and a detailed accounting of the agency's income and expenditures. It's all here.

In 2007-08, hunters harvested 323,070 deer. The harvest was down 11 percent, and the antlered and antlerless harvests were down, respectively, 19 percent and five percent. This drop was largely due to the heavy rain and fog that hunters faced throughout the opening day of the regular firearms deer season.

The 2007 bear harvest was 2,360, including 41 taken during the state's second archery bear season, and 293 taken during the extended bear season, concurrent with the opening several days of the firearms deer season, held in northeastern part of the state, to help alleviate bear/human conflicts there.

Certainly among the year's highlights was the graduation of the 27th Class of Officers from the Game Commission's Ross Leffler School of Conservation. Completing nearly a year of training, 22 new WCOs were commissioned and assigned to districts across the state.

One of the most exciting programs initiated by the agency in recent years has been the Mentored Youth Program, through which youngsters under the age of 12 may go hunting, with an adult mentor, for antlered deer, spring gobblers, squirrels, woodchucks and, most recently, coyotes. According to the 2007-08 Game Take Survey, published in last month's Game News, close to 60,000 young men and women took advantage of this opportunity, harvesting, among other game, more than 61,000 squirrels and almost 5,200 bucks.

In June of '08 the first big game scoring sessions conducted since 2001 were held. Results will be published in next month's Game News, but some of the highlights are a new number 1 black bear, a state record nontypical elk that also ties for third place in all-time Boone and Crockett club records, and a new state record nontypical archery buck. Pennsylvania truly is home to many outstanding record class big game animals.

This year also saw the agency start working with the legislature to increase penalties for Game Law violations. Penalties here are so lenient that poachers from other states have admitted to coming here, even though they feel the risk of getting caught here is higher, because our fines are low and there's no possibility of jail time.

The Game Commission continues to operate within a long-outdated funding structure. License fees have remained unchanged for 10 years, while costs have continued to skyrocket. The biggest challenge facing the Game Commission, and all those with an interest in the wellbeing of Pennsylvania's wildlife, is enacting new license fees or some other form of additional funding for wildlife conservation and management here.

Again, the following pages document what the Game Commission has done for you and for wildlife over the past year. Please, take a little time to see what we've been up to.

Maintain and improve populations for consumptive and non-consumptive recreational use and their many public values.

As Pennsylvania's wildlife management agency, the Game Commission is responsible for managing all 467 species of wild birds and wild mammals. Therefore, primary attention is necessarily limited to select game species and our most imperiled species due to funding sources and limitations.

Work continued throughout the year to develop, complete and implement management plans for all species or species groups (e.g., grassland nesting birds). Many of these plans are available on the PGC's website

Approximately 45 annual, operational field surveys are employed to assess population trends or characteristics of populations for about 40 species of big and small game, furbearers, migratory game birds, and endangered and threatened species found in the commonwealth. Hunter/trapper mail surveys were conducted to track the harvests and participation for 29 game and furbearing species, and harvest was monitored for deer and wild turkey through postal mail card reporting. In addition, check stations and/or field checks were used to catalog deer, bear, elk and bobcat harvests. Based on population and harvest trend assessments, game and furbearer species seasons and bag limits were established for the 2008-2009 license year, providing recreational and taking opportunities on a sustainable basis.

The 2007-08 Game Take and Furtaker surveys were completed in the spring of 2008. These annual hunter and trapper surveys estimate small game and furbearer harvests, numbers of hunters and trappers and days of effort. For participation and harvest information see the December issue of *Game News* or check out the agency's website.

During the last year, white-tailed deer research and management activities continued to focus on deer survival and antlered harvest rates in WMUs 2G and 4B. From June 2007 to July 2008, we recorded 83 mortalities of radio-collared deer. Hunting accounted for 63 percent of mortalities. Other mortality factors included deer-vehicle collisions, poaching, natural causes and capture-related deaths. An additional 269 deer were captured and fitted with radio-collars in these two WMUs between January and April 2008. At the end of April 2008, more than 350 radio-collared deer were being monitored on the two study areas. This research is being conducted in cooperation with the Pennsylvania Cooperative Fish and Wildlife Research Unit at Penn State.

During the 2007-08 season 33 PGC deer aging teams were deployed for seven days to collect sex, age and kill (SAK) data from a sample of harvested deer, with more than 25,000 deer examined. In addition, nearly 2,700 teeth were pulled from 2.5-year-old and older males to be aged using cementum annuli. This technique will provide a more accurate age structure of this sample of older adult bucks.

SAK data was used to estimate deer harvests from the 2007-08 hunting seasons. Based on hunter harvest reports and SAK data, hunters harvested 323,070 deer in the 2007-08 seasons. Overall, this was an 11 percent decrease from the 2006-07 season harvest. Hunters took 109,200 antlered deer in the 2007-08 seasons, down 19 percent from the previous license year's harvest of 135,290. Also, hunters harvested 213,870 antlerless deer in 2007-08, a five percent drop from the 226,270 antlerless deer taken in 2006-07. Yearling bucks comprised 56 percent of the 2007-08 antlered harvest, which is the same percentage posted in 2006-07. Button bucks and doe fawns were 24 percent



2007-08

and 20 percent, respectively, of the antlerless harvest, and almost identical to 2006-07 season rates. Statewide hunter reporting rates continued their decline to slightly less than 40 percent.

The Deer Management Assistance Program (DMAP) was developed to provide public and private landowners a tool to better control deer numbers on their properties through hunting. For 2007-08, the Commission approved 801 applications, up from the 758 in 2006. Enrolled acres decreased to 1,470,306 from 1,877,850 in 2006. The number of coupons requested and approved dropped from 36,816 in 2006 to 32,379 in 2007. Hunters redeemed 22,148 DMAP coupons. With all DMAP harvest permit holders required to submit a report card, 79 percent reported a harvest of 5,006 antlerless deer.

Epizootic hemorrhagic disease (EHD) caused mortality in deer in parts of southwestern and southcentral Pennsylvania in 2007. This marked the second time that the disease had been confirmed in Pennsylvania. EHD is a common disease in white-tailed deer populations of the U.S., especially to the south of Pennsylvania and is contracted by the bite of insects called “biting midges.” Deer population impacts from EHD were dramatic in localized areas but insignificant at the management unit level.

The deer management program continued to engage citizens directly in deer management discussions during the year using Citizen Advisory Committees. Citizen Advisory Committees were completed in WMUs 2A, 4C, 4D, 4E and 5A to assess the level of deer-human conflicts and citizens’ desire for more, fewer, or the same number of deer.

As part of a greater emphasis on outreach and education regarding the deer program, the PGC held 13 open houses throughout Pennsylvania in the last year. Open houses provided a forum for the public to learn more about deer and the deer management program and to speak to PGC personnel from a variety of disciplines. Other products included brochures and a booklet detailing various aspects of deer management, a revised deer website, and the start of the *Deer Chronicle*. The *Deer Chronicle* will be published twice a year to better inform Pennsylvanians about deer and deer management.

Approximately 140 elk were radio tracked throughout the year to evaluate survival, distribution and expansion of movements across the range in Northcentral Pennsylvania. An annual population survey was conducted in the fall of 2007 to estimate the elk population. A total of 1,048 elk sightings were recorded, and of those, 77 were marked animals. The population estimate resulting from the fall 2007 survey was 875, but results of the survey may be biased due to the abundant acorn crop, which can lead to poor elk sightability. As a result, an estimate of 700-750 elk is a more reasonable number based on historic annual population increases of 11-18 percent.

In continuing efforts to assess elk recruitment, 28 newborn calves were captured in the spring of 2008. During the four years of this project 90 calves were captured. Average calf weight from 2005-08 for the 83 calves captured and marked was 41 pounds at capture. Sixty-five calves were monitored for the first year of life and nine died. Mortalities were due to poaching, legal harvest, pneumonia, roadkilled and four unknown cause. Sixty-five percent of radio-collared adult cows calved during the 2007 season.

Elk hunting seasons were held in September and November 2007. Ten hunters participated in the month long September 2007 elk season, and two antlerless elk were harvested. Forty hunters participated in the 6-day elk season during November 2007, with 33 hunters taking an elk. Nineteen antlerless and 14 antlered elk were harvested in Elk, Cameron and Clearfield counties.

The agency’s elk biologist and wildlife veterinarian have teamed up on an ongoing Animal Health and Diagnostic Commission (AHDC) funded study of the nutritional

mineral status of Pennsylvania elk grazing on reclaimed strip mines. Along with liver samples, soil and vegetation samples were collected and processed.

Efforts moved forward during the year to enhance the prevention and early detection of Chronic Wasting Disease (CWD) by sampling of both targeted and hunter-killed deer

and elk. Targeted animals (those exhibiting clinical signs that are consistent with CWD) were sampled in conjunction with the hemorrhagic disease (EHD) epizootic, and through regular submissions from around the state. In addition, road-killed deer in areas closer to West Virginia were tested in the spring. The Pennsylvania Interagency CWD Response Plan underwent its annual review and revision in light of new information and with greater emphasis on controlling risk factors in the commonwealth.

The combined effort of the PGC, Pennsylvania Department of Agriculture (PDA), Pennsylvania Department of Health (PDH), and U.S. Department of Agriculture (USDA) personnel resulted in 3,810 CWD samples being processed statewide during the rifle deer season. Of the 3,944 deer tested for CWD all samples were negative.

All 35 elk harvested by hunters were sampled for CWD and tested for tuberculosis and brucellosis with all samples testing negative. Combined with those that died from other causes, 45 elk were tested for CWD and all were negative.

There has been continued cooperation throughout the year with the PDA on wildlife health issues. In particular, a unified response to USDA Veterinary Services regarding their Federal Rule on interstate movement of farmed cervids was developed. PDA was also provided with locations of cervids behind fences that were not registered in their Herd Certification/Monitoring programs.

To monitor Pennsylvania's bear populations, statewide capture and tagging; mandatory check stations during the hunting season; aging of teeth collected from road-killed, captured or harvested bears; assessment of reproduction during visits to dens of hibernating bears fitted with radio-collars; and statewide wildlife food surveys were performed.

A near record 135,584 bear hunting licenses were sold during 2007, slightly below the record 142,062 licenses sold in 2005. Hunters harvested 2,360 bears, which included 41 during the archery season, 2,026 during the 3-day season and 293 during the extended season. The harvest rate of tagged bears during the 3-day season was 15 percent, whereas in most years 19 to 21 percent of tagged bears are harvested. The 2007 harvest rate was affected by a wet snow, accompanied by fog in some areas, which reduced hunter participation and success across most of the northern bear range on opening day.

Based on the ratio of tagged-to-untagged bears observed in the harvest, the 2007 statewide bear population was estimated at 11,000 to 16,000 bears. Statewide population estimates have been relatively stable, near 15,000, since 2000.

In February, 2,556 teeth collected from bears during 2007 were shipped to a contracted lab for processing and aging. Results were returned in July and posted on the agency's website so successful hunters could learn the age of their bear. The average age of harvested bears was 2.5 years for males and 3.5 years for females.





2007-08

Most WMUs have stable to slightly increasing population trends, however, estimates from 2007 corroborated a declining population trend in WMU 3D during recent years. Consequently, the extended bear season was closed in WMU 3D for 2008. Unit 3D was the first area opened to extended hunting in 2002; extended season hunting was available there through 2007. Analyses of human-bear conflict trends and harvest rates resulted in the extension of bear hunting opportunities during the 2008 regular firearms deer season in WMUs 4C, 4D and 4E.

Cub production and survival was monitored by visiting 43 adult female bears in winter dens during January, February and March. In all, 42 adults, 66 cubs and 6 yearlings were tagged in 7 counties. The average number of cubs per litter was 3.1 and the sex ratio of cubs was near 50 percent.

There were 1,623 entries in the statewide human-bear conflict database during 2007. Conservation officers relocated 255 bears that had been trapped at reported human-bear conflict sites; 28 bear damage claims totaling \$10,273 were approved for payment, and 10 bears were euthanized because of crop damage or repeated nuisance behavior.



Furtaker license sales have continued to increase as trappers and hunters intensively pursue Pennsylvania's abundant furbearers. During the 2007-2008 harvest seasons, 28,033 furtaker licenses were sold, the highest number recorded since 1989. Harvest levels increased for all species except beaver, which declined slightly from last year. Game Commission staff continued efforts to monitor changes in furbearer populations, with the most intensive work focused on fishers, bobcats, beavers and river otters.

The PGC randomly allocated 1,010 bobcat harvest permits during September 2007. Each permit allowed for the harvest of one bobcat from within Wildlife Management Units 2A, 2C, 2E, 2F, 2G, 3A, 3B, 3C, and 3D (combined). Hunters and trappers reported 356 bobcats harvested from 28 counties and all WMUs that were open to harvest. Due to favorable weather, 58 percent of the harvest occurred after January 1, 2008.

The addition of WMU 2A during the 2007-2008 season increased the available bobcat harvest area in the commonwealth by 10 percent. The addition of WMU 4D for the 2008-2009 season should expand the allowable harvest area by 14 percent and will better distribute harvest throughout the established bobcat range. These recent changes have resulted in approximately 23,020 square miles of land area currently open for bobcat hunting and trapping. The bobcat permit allocation was set at 1,435 permits for the 2008-2009 seasons.

During 2005-2006, regulations adopted to legalize the use of cable restraint devices to harvest red foxes, gray foxes and coyotes during late winter periods. Trappers are required to complete a specialized training session and to pass a written exam prior to receiving certification to use these devices. As of June, 30, 2008, 2,153 trappers had received cable restraint training and passed the certification exam. The overall efficiency of cable restraints for red and gray foxes has been high, but efficiency for coyotes

has been marginal. Cable restraint regulations were refined during this fiscal year to increase device efficiency for coyotes.

A fisher management plan was developed during this fiscal year. The plan provides supporting objectives and strategies to achieve goals related to population monitoring and enhancement, habitat assessment, and development and implementation of a harvest program. Implementation of this plan will be initiated in the next fiscal year.

A decision by the Pennsylvania Supreme Court in December 2007 vested responsibility for feral swine (wild boar) with the Game Commission, and as a consequence they could be taken only as authorized by the Game Code and its regulations. The Commission suddenly was tasked with developing regulations for the management of feral swine.

Feral swine are not native to Pennsylvania. They are known to cause tremendous damage to habitat and property and pose an ever-present threat to wildlife and the biosecurity of the state's multi-million-dollar pork industry. The Commission determined that the complete eradication of feral swine from the wild within Pennsylvania is necessary to prevent further harm to its natural resources, agricultural industry, forest products industry and to human health/safety interests.

The PGC executive director, following extensive discussions with PDA, the Feral Swine Task Force and the Governor's Invasive Species Council, in May 2008 issued an executive order removing protection on feral swine in 64 of the state's 67 counties. The only exceptions (Butler, Bedford and Cambria counties) were counties with official eradication trapping operations underway.

Additionally, the executive order authorized licensed hunters to participate in the unlimited incidental taking of feral swine during big game hunting seasons. The order specified that feral swine trapping, by permitted individuals, will only be allowed from the close of the flintlock muzzleloading season in mid-January to the beginning of spring gobbler season, and from the end of spring gobbler season until the beginning of archery deer season. Any person taking feral swine must report it within 24 hours to the Game Commission region office that serves the county where the animal was harvested.

Eleven feral swine from four counties (Bedford, Columbia, Indiana and Wyoming) were trapped, euthanized and tested in FY 2007-08. All tested negative for diseases.

As FY '07 closed, the first year of plan implementation for the updated wild turkey management plan had been successful with 29 of the 47 strategies in progress.

Four hunting season changes were implemented for the 2007-08 year that affected turkey hunting opportunity. Legal hunting hours for all small and big game (except migratory game birds) were extended from sunset to one-half hour after sunset, although the noon closure for spring turkey season was retained. Fall hunters are now permitted to pursue turkeys with dogs, joining 22 other states. Game Commission Board of Commissioners discontinued spring season fluorescent orange requirements, but the agency still recommends voluntary usage of florescent orange when moving through the spring woods. Finally, the spring season was extended to include the Memorial Day holiday.

In 2007-08 Pennsylvania hunters realized respectable turkey harvests, as turkeys continued to be the second most popular game species. Turkey population indices show the statewide population continuing to increase from the drop in 2005, with the 2008 spring population estimated at approximately 335,000 turkeys, which is slightly higher than the 10-year average. There were 223,808 hunters for the spring 2007 season, which is slightly below the 10-year average of 232,014. Statewide hunter success was 16 percent and similar to the previous 10-year average. Spring hunter success has been as high as 21 percent (in 2001), and as low as 3 percent (1978). The 2007 spring harvest of 36,296 bearded birds (which does not include second birds harvested with the special turkey



2007-08

license) was four percent less than spring 2006, and five percent less than the previous 10-year average, during which time there were record harvests of more than 40,000 bearded birds from 2000-2003.

The spring 2007 hunting season marked the second year hunters could harvest a second bearded bird with the appropriate license, state-wide, but only one bearded bird per day. Hunters purchased 7,585 (8,041 in 2006) special turkey licenses, which had mandatory reporting (post-age-paid post card) regardless of success. Because this was only the second

year of mandatory reporting, we mailed reminder letters to 1,000 randomly selected nonrespondents, of which 95 percent did not harvest a second turkey. The estimated harvest attributable to the second license was 1,507 (1,454 in 2006) with a success rate of 20 percent (compared to 18 percent in 2006).

During the 2007 youth spring turkey hunt 5,256 juniors participated with a total estimated harvest of 1,524 bearded birds, for an astounding success rate of 29 percent. Beginning in 2007, youngsters under 12 years of age were permitted to participate in the spring turkey season as long as they were mentored by a licensed adult 21 years or older. Participating mentored youth harvested 3,496 spring gobblers, or approximately eight percent of the total spring harvest.

The fall turkey hunting season is the primary means of managing the turkey population. Data from population indices showed that the fall 2007 season could be lengthened in WMU 4D (from 2 to 3 weeks), but the seasons in two WMUs (2A & 2F) needed to be shortened (from three to two weeks) to aide in population restoration. Numbers of fall turkey hunters (162,323 in 2007) and days of fall turkey hunting (522,911 in 2007) have been decreasing since the mid 1990s. Even so, the fall 2007 harvest of 25,369 was 4 percent higher than the 2006 harvest (24,482), but 29 percent below the previous 10-year average. This trend of lower harvests is due to a combination of shorter seasons in almost half of the WMUs since 2004, average to below average spring reproduction, fewer fall turkey hunters and abundant fall mast crops, which tend to disperse turkey flocks, making them more difficult for hunters to locate. Even though participation has been decreasing, statewide fall hunter success increased in 2007 to 16 percent (13 percent in 2006), and was 15 percent higher than the previous 3-year average. Hunter success has been as high as 21 percent (2001), and as low as 4 percent (1979).

The 2007-08 year marked the third year of a 4-year cooperative research study with New York and Ohio to determine harvest rates of male wild turkeys during the spring hunting season in these three states. Each winter 300 male turkeys are being leg banded in each state, with half of the bands providing a \$100 reward for reporting the harvest. Reward money is being furnished by a \$121,893 grant from the NWTFF. The number of turkeys banded now exceeds 2,500 for the first three years of the study, totaling \$42,500 in reward payments to date, with \$17,100 to Pennsylvania hunters.

Some wild turkey flocks in the greater Pittsburgh area have grown in numbers beyond the local social carrying capacity. In some of these areas hunting is not a viable option and/or habitat modifications and the cessation of artificial feeding are unsuccessful in minimizing nuisance problems. In 2008 we initiated a 3-year pilot project to trap and transfer nuisance flocks to rural areas at least 10 miles away to determine if relocation of nuisance turkeys is a viable option for incorporation into future PGC wildlife management plans from both an ecological and social perspective. We are collecting data on movement, recidivism, survival and captures/unit effort.

For the third consecutive winter the PGC captured and transferred wild turkeys to South Dakota for their restoration efforts, in exchange for wild ring-necked pheasants

released into southwest Pennsylvania for population restoration. All turkey transfers were from over-abundant flocks in urban/suburban areas of Allegheny and Washington counties. The 44 turkeys transferred last winter bring the 2006-2008 total to 113 birds.

Numbers of Pennsylvania grouse hunters estimated for 2007-08 dropped eight percent from 2006, following the decline occurring for most small game hunters. Days of participation decreased by 7.6 percent. Harvest per hunter-day remained the same, reflecting a similar or stable grouse population. Harvest estimates showed that 96,429 hunters took 82,020 birds.

The 2006 statewide grouse cooperator survey showed that the average statewide flushing rate was 1.41 flushes per hour, up by almost 32 percent from the previous season. This flushing rate, which was similar to the 1.39 in 2000, was the second consecutive increase, and approximated the past 42-year average of 1.42. Compared with the previous year, all six regions had higher flushing rates.

In early October 2007, the annual grouse/woodcock newsletter was mailed to more than 700 cooperating grouse and/or woodcock hunters. Included were the results of the previous bird hunting seasons: 338 grouse hunters reported on 9,440 hours afield and 109 woodcock hunters reported 1,465 hours.

The PGC cooperates with the U.S. Fish and Wildlife Service in completing annual Mourning Dove Call Count surveys. In late May conservation officers conduct mourning dove surveys along 17 routes across the state. Results from 2008 indicated no significant population change from last year. Since 1966, mourning dove populations have not changed significantly in Pennsylvania.

Harvest Information Program surveys estimated 37,500 hunters took 509,100 doves during 159,000 hunter days in Pennsylvania during the 2007-2008 season. This was a 19 percent increase in hunter numbers, a 40 percent increase in hunter days and a 37 percent increase in birds bagged.

A summary report for the 2003-2005 dove reward band study in which PA participated was produced during the year. The primary study objectives were to produce estimates of age-specific harvest rates and band reporting rates in a representative set of states in each dove management unit. Almost 100,000 doves were banded nationally, nearly 5,000 in Pennsylvania, over the three study years. Averaged over all states, at least 80 percent of the harvest of a state's banded population occurred in the same state. Ninety-three percent of the doves recovered in Pennsylvania were banded in Pennsylvania. Total estimated average population abundance in the 28 participating hunting states was 320 million doves. Pennsylvania's average dove population was estimated at 8,150,000.

The PGC cooperates with the U.S. Fish and Wildlife Service in completing annual Woodcock Singing Ground surveys. From mid-April to early-May wildlife conservation officers conduct woodcock surveys along 73 routes across the state. Results from 2008 indicated no significant population change from last year for woodcock. Since 1968, woodcock population indices have declined 42 percent, although not significantly in the last 10 years.

An estimated 10,599 woodcock hunters (most of any eastern state and fourth nationally) took about 11,141 woodcock during the 2007 hunting season. Compared to 2006, this was a five percent increase in the number of hunters pursuing woodcock. The harvest decreased by 39 percent, so hunters did not encounter as many birds migrating through the commonwealth in the fall of 2007.

A statewide, long-range woodcock plan was under preparation and near completion as the year ended. The draft plan provides a comprehensive and current summary of



2007-08

woodcock taxonomy, biology, population trends, habitat relationships and trends, hunter harvest, economic significance, partnerships and population restoration approaches. The plan has a goal of returning woodcock populations to densities that would provide improved hunting and viewing opportunities.

PGC staff completed a long-anticipated draft statewide ring-necked pheasant management plan, and made it available in May for public review and comment. The pheasant management plan provides a comprehensive and up-to-date summary of pheasant taxonomy, biology, population trends, habitat relationships and trends, the pheasant propagation program and its role, hunter harvest, economic significance, partnerships and population restoration approaches in Pennsylvania. The management plan focuses on providing quality pheasant hunting and outlines multiple objectives and more than 50 strategies to achieve six goals during the 10-year plan.

Wild pheasant restoration projects are underway in Washington County (Pike Run Watershed), and in an area including Montour, Northumberland and Columbia counties. In 2008, 200 wild trapped pheasants (27 males, 173 females) from South Dakota were released in Washington County, the final year of wild pheasant releases for this area. Since 2005, 591 wild trapped pheasants from South Dakota have been released. Crowing counts, landowner brood surveys and flushing surveys will be used to monitor pheasant populations over the next three years.

In 2008, 366 pheasants (90 males, 275 females) trapped in Montana were released in the Montour, Northumberland and Columbia counties area. In 2007, 329 trapped pheasants from South Dakota and Montana (sex ratio of 1 male/3 females) were released. Pheasants were monitored using radio telemetry, crowing counts, brood surveys and flushing surveys. In 2007, 55 hens, and in 2008, 67 hens, were radio-collared prior to release. An additional 300 birds will be trapped and released in 2009. Population monitoring will continue for three years post trap and transfer.

The Game Commission typically operates four game farms and used to raise and distribute about 230,000 ring-necked pheasants annually. However, due to fiscal cut-backs, annual production goals were cut to approximately 100,000 birds in FY 2005-06, which continued through FY 2007-08. Given the diminished number of birds, we focused stocking on State Game Lands and cooperator lands managed by the Commission where the best habitat conditions exist to provide public pheasant hunting.

According to Game Take Survey responses, 90,548 hunters enjoyed pheasant hunting during the 2007-08 seasons and reported harvesting 168,094 pheasants. Pheasant hunters also reported more than 405,715 hunter-days of recreation during the season. Harvest per hunter day increased for the first time in four years. Although pheasant hunting in Pennsylvania remains popular, participation has continued to decline in recent years. Commission staff distributed 126,536 pheasants during FY 2007-08. Shipments for the youth pheasant hunt consisted of 15,174 birds, which were released at designated sites throughout the commonwealth in early October. In FY 2007-08, 19 clubs conducted mentored youth hunting events and were provided 1,504 pheasants.



For the regular, fall season 81,995 birds (52,093 males and 29,902 hens) were stocked in October and November. An additional 4,940 hens were held for the late small game season and stocked prior to the Christmas holiday season. Fall releases were limited to a pre-season and two in-season releases.

The Northern Bobwhite Conservation Initiative (NBCI) is a 22-state restoration plan published in 2002 by the Southeast Quail Study Group (SEQSG), a technical committee of the Southeast Association of Fish and Wildlife Agencies. The NBCI, which aims to restore populations of northern bobwhite quail by landscape-scale restoration of native grassland habitats, is being revised to include additional states in historic Northern bobwhite range. Populations of bobwhites have declined by 75 to nearly 100 percent over the last 40 years across most of their historic range. They have declined by 97 percent in Pennsylvania.

Preseason duck banding continued in cooperation with the Atlantic Flyway duck banding program. Banding information is essential for determining the timing and distribution of the duck harvest, survival, harvest rates and migration patterns, and allows evaluation of changes in hunting regulations. The 2007 pre-season (August & September) duck banding at 21 banding sites in the commonwealth contributed 2,946 newly banded ducks to waterfowl research and management efforts in Pennsylvania and the Atlantic Flyway.

Avian influenza monitoring was also an important component of the 2007 preseason banding efforts. A sample of mallards, wood ducks, blue-winged teal, green-winged teal, pintails and black ducks were tested as part of combined state and federal early detection monitoring for the Asian H5N1 virus. More than 260 samples were collected from hunter-harvested ducks in the Northwest, Southeast and Northeast regions. As expected, various naturally occurring low pathogenic (LP) AI viruses were detected in some of these samples. Only one LPH5N1 positive sample was detected, but it was of the same LP North American strain that was detected in 2006. The role of migratory birds in transfer of the highly pathogenic (HP) AI virus remains unclear and controversial.

The Atlantic Flyway Midwinter Waterfowl Survey (MWS) provides information about waterfowl populations and distribution, and is an important component of management programs at the state, flyway and even continental levels. Although breeding ground surveys have become the primary source of population status information used in setting most waterfowl hunting regulations, MWS results still guide harvest management for some species, including tundra swans and Atlantic brant. MWS data is also important in assessing progress toward species population goals set forth in the North American Waterfowl Management Plan, and is useful for documenting long-term shifts in the spatial distribution of wintering waterfowl, assessing the locations and status of key wintering habitats, and various other applications.

A total of 61,388 waterfowl were observed in Pennsylvania during the 2008 MWS. This total included 4,778 dabbling ducks (mostly mallards and black ducks); 416 diving ducks; 2,360 mergansers; 52,504 geese (74 percent Canada geese and 26 percent snow geese); and 1,201 swans (98 percent of which were tundra swans).

The number of waterfowl observed was 25 percent lower than in 2007. Although four of the six major individual wintering species increased from 2007, Canada and snow geese (the two most numerous species) both decreased, accounting for the lower overall numbers. Southeastern Pennsylvania continued to account for the highest numbers of waterfowl observed in the state, but totals there were down 32 percent from 2007. Northwestern Pennsylvania totals were up 16 percent from 2007, while Susquehanna River totals were down 21 percent.



2007-08

From April 15 to May 5, 2008, PGC staff completed the cooperative Atlantic Flyway Breeding Waterfowl Survey in Pennsylvania. The objective of the survey is to provide breeding waterfowl population estimates for the portion of the Atlantic Flyway from Virginia to New Hampshire. Population estimates are used in the Atlantic Flyway Adaptive Harvest Management process to determine waterfowl hunting season frameworks. Mallard and American black duck breeding pair estimates were significantly below average, while wood duck and Canada goose estimates were similar to average. The number of indicated mallard breeding pairs (65,739) was the lowest since 1992 and 33 percent below the average of 97,624 pairs. This is consistent with trends from other indices of statewide mallard abundance (the North American Breeding Bird Survey (BBS) and the number of pre-season-banded mallards). The trends from all three indices indicate declines in breeding mallard abundance in PA since the late 1990s. As usual, eastern Pennsylvania had the highest density of breeding mallards, while northeastern Pennsylvania had the next highest.

Only one pair of American black ducks was observed on a survey plot in southeastern Pennsylvania and resulted in a statewide estimate of 269 pairs. Black ducks have been observed at very low densities since the survey was initiated in 1989. Breeding black ducks in Pennsylvania are increasingly rare and a cause for concern.

There were 42,791 wood duck breeding pairs estimated in 2008, more than 16 percent below the average of 51,191 pairs and the lowest recorded since 1996. However, the 2008 estimate was not significantly below average and could be a result of expected sampling variation. Trends in wood duck abundance have indicated stable to slightly increasing populations across all years of the survey. Wood duck densities were highest in northeastern and northwestern Pennsylvania.

The estimate of total blue-winged teal (1,840) and green-winged teal numbers (1,979) were below average in 2008. Teal migrate relatively late compared with the other species encountered on this survey, so these estimates are not necessarily indicative of true breeding populations in Pennsylvania.

Estimates of hooded mergansers (3,031) were near average, while the common merganser estimate (18,773) was above average. The trends for both breeding merganser species appear stable since 1993.

Canada goose breeding pairs were estimated at 100,174 and similar to the average of 91,328. Pairs were most abundant in southeastern and northwestern Pennsylvania. The total population estimate of 246,499 geese was similar to the recent 5-year average of 285,244. As expected, the highest densities of geese were observed in southeastern and northwestern portions of Pennsylvania. The recent trend in Canada goose estimates appears stable following rapid growth during the 1990s.

Projects and programs conducted by the PGC's Wildlife Diversity staff are largely directed at the conservation of nongame species through the implementation of Pennsylvania's Wildlife Action Plan. This plan was developed in response to a federal mandate to guarantee future State Wildlife Grant (SWG) Program funds for the many species that were formerly "under the radar" because limited resources were available for those not hunted or trapped. SWG funds are intended to proactively manage wildlife populations, instead of waiting until declining species require crisis care to resuscitate their populations.

A record of 155 bald eagle nests, including 24 new locations, were monitored by Commission staff and more than 65 individual volunteers and organizations in 2008. Volunteers and staff counted 184 bald eagles and no golden eagles during the annual

winter survey.

Twenty-seven peregrine falcon nesting sites, including three new sites, were monitored with assistance from 45 volunteers. Sixty-four young were produced, of which 51 were banded. Public-venue bandings were held at the Rachel Carson State Office Building, Harrisburg, and Gulf Tower and Cathedral of Learning, Pittsburgh. The commonwealth had three cliff nests and three nestlings were successfully transferred from bridge nests on the Delaware River to a cliff reintroduction site in West Virginia.

Two “citizen science” projects, that is, projects that extensively engage volunteers — the 5-year state Breeding Bird Atlas effort and the annual Breeding Bird Survey — have made impressive contributions to our knowledge of the ecology of Pennsylvania’s birds. Since the beginning of the Atlas project, volunteers have contributed more than 96,775 block hours and 31,182 hours of logistical support. They drove more than 803,644 miles while generating 690,533 bird records in at least 4,928 of 4,937 atlas blocks. PGC Diversity staff provided both supervision and survey effort.

Great egret, black-crowned night-heron and yellow-crowned night-heron are classified as endangered in Pennsylvania. These and other colonial wading birds are particularly vulnerable to disturbance because their nests are clustered in colonies. Active nests were counted in spring 2008 at the only two known great egret colonies and ten black-crowned night-heron colonies. The annual survey at Wade Island counted 98 black-crowned night-heron nests and 178 great egret nests. While heron nests increased slightly and egrets held steady, cormorant nests on Wade Island increased dramatically, from 73 in 2007 to 112 in 2008, which may impact nest trees and increase competition for nesting space with the herons and egrets. Several black-crowned night-heron colonies declined in size in 2008, including the second largest colony at Kiwanis Lake, York County. A statewide survey of great blue heron colonies was completed in 2008, with a total count 2,208 active great blue heron nests across 52 counties.

Sixty-one grassland sparrows were banded and 10 nests found during an ongoing study of mine habitat quality. Telemetry was used to locate nests and determine the efficiency of auditory surveys. Conservation efforts have been initiated on State Game Lands for Henslow’s sparrow.

All of Pennsylvania’s bat species are microchiroptera (small bats) and all feed exclusively on insects. As major predators of night-flying insects, including many agricultural and forest pests, they provide control without expense or harmful chemicals. Because most of our bats congregate in large numbers in few areas, they are highly vulnerable to environmental changes.

Bird and bat monitoring protocols have been adopted and are being used in cooperation with 12 wind power developers that signed voluntary agreements. PGC Wildlife Diversity biologists participated throughout the year in various aspects of bird and bat ecology related to wind industry development and participated in Pennsylvania Wind and Wildlife Collaborative meetings.

Routine surveys of 19 hibernacula conducted January through March 2008 counted 96,573 bats of six species in 8 inactive mines, 7 caves and 4 tunnels. More than 90,000, 93 percent, of hibernating bats used mines and tunnels — abandoned manmade structures. Little brown bats comprised 93,294 of the count, followed by 1,138 eastern pipistrelles, 801 big brown bats and 581 northern long-eared bats. Three sites harbored six state threatened small-footed bats. A total of 123 federally endangered Indiana bats were found in three hibernacula. The mine at Canoe Creek, site of the state’s largest known population of hibernating Indiana bats, is surveyed biennially and was not on the 2008 schedule. Populations of hibernating bats were stable in surveyed sites.



2007-08

White-nose syndrome (WNS) — a recently described threat to bats — killed tens of thousands of bats in New York and New England hibernacula during the winter of 2007-08. One confirmed WNS site is just 11 miles east of the New York/Pennsylvania border, putting us on the forefront of potential expansion. More than 20 state and federal agencies, universities and research institutions are collaborating to diagnose its cause and limit its spread. The PGC biologist coordinating the commonwealth's WNS response lead presentations on coordination,

funding and assessing population impacts at a regional planning meeting in Albany, New York. In-state efforts included 18 additional hibernacula surveys conducted specifically looking for symptoms of white-nose syndrome. Some bats at three sites had small visible signs of white fungus, but the associated physical signs — daytime flight, loss of fat reserves, mortality — were not found. A grant agreement was submitted to the U.S. Fish and Wildlife Service to support statewide monitoring and detection of WNS and study sites have been established. Focused research will be conducted in 2008-2009 on torpor/arousal patterns during hibernation. Pennsylvania has provided bats to the Cornell and Boston University laboratories and the Center for Wildlife Diseases in Madison, Wisconsin for investigating varying aspects of WNS research.

The range of the threatened Allegheny woodrat is — or was — comprised of the rockier sections of states from southern Connecticut to northern Alabama. The species is now extirpated or declining in over 35 percent of its range due to development and forest fragmentation, loss of a quality mast-producing trees, and a raccoon parasite.

Despite their very specific habitat preferences, northern flying squirrels were once found across Pennsylvania's northern tier. While still common farther north, in Pennsylvania this larger cousin of the familiar and abundant southern flying squirrel is now limited to fewer than a dozen sites in forests with large percentages of conifers. Most sites are in the commonwealth's rapidly developing northeast corner. At the October 2007 meeting, the Board of Commissioners gave final approval to add the northern flying squirrel to the state's endangered species list.

PGC diversity biologists participate in numerous regional efforts. The Northeast Habitat Classification Project is developing detailed descriptions of habitat features across state boundaries that will become the standard for Wildlife Action Plans (WAP) within the region. In addition to research and population monitoring, a considerable amount of independent work and assistance is provided by regional wildlife diversity biologists assigned to each of the PGC's six regions. The primary responsibility of these region biologists is the habitat-based Private Landowner Assistance Program, but they have also developed two species-based conservation initiatives.

The barn owl is a species of concern that has great management and recovery potential in Pennsylvania. Found in agricultural fields, grasslands and other open areas, these owls often nest in barns, silos and manmade nest boxes because large, dead trees are increasingly difficult to find. Regional diversity biologists launched an initiative focused on assessing foraging, nesting and roosting habitats where barn owls exist (or existed in the past), erecting nest boxes in suitable habitat, and documenting productivity. In 2007, regional diversity biologists made 177 site visits and identified 47 active nests, including the first nest documented in the Southwest Region. One hundred and thirty owlets were banded at 29 sites and feathers were collected for a DNA study by York College.

The Northwest Region's diversity biologist initiated a study of the once common "common nighthawk." Nighthawks, like whip-poor-wills, are nightjars — nocturnal birds

with flat heads and tiny bills, but huge mouths that open far back to capture insects while in flight. Nighthawks have been declining both as migrants and as breeders in Pennsylvania. They do not build nests; two eggs are laid directly on the ground or on a gravel roof. During the initiative's first nesting season in the summer of 2007, the biologist and volunteers checked 23 artificial nest pads and 54 roofs in Erie, Meadville, Oil City and Warren, but no nests were found. However, road surveys confirmed the presence of nighthawks in Erie and Meadville and there were anecdotal reports from Oil City and Warren.

The Private Landowner Assistance Program (PLAP) provides a technical resource for landowners wishing to manage their properties for nearly 100 bird and mammal species of concern found throughout the state. After visiting the property of an interested landowner and discussing the owner's objectives, the regional wildlife diversity biologist develops a management plan that is habitat-based and focuses on both species of concern and the landowner's goals. During FY 2007-08, private landowner consultations resulted in more than 150 plans covering nearly 17,000 acres.

Regional diversity biologists are also instrumental in comprehensive planning for state game lands, providing general ecology habitat relationships and habitat treatments that can be used to enhance habitat for species of concern.

Acquire, protect, maintain and enhance an array of habitats on public and private lands.

The Game Commission's public access program is being upgraded to increase its visibility and utility for hunters and trappers and make it more flexible for landowners. There are more than 3.6 million acres of private land open to public hunting in the PGC's Farm Game, Safety Zone and Forest Game programs. The PGC provides multiple services on private lands through the Farm Game and Safety Zone Cooperative programs. The following habitat enhancements occurred on these lands:

- Land Managers and Food & Cover Crews made 27,798 cooperator contacts regarding habitat and hunting issues on their lands, an increase of 13,716 over the previous year.
- The Commission provided 459,410 tree and shrub seedlings to cooperators for habitat improvement.
- Commission staff performed 46 acres of border cuts.
- Food & Cover Corps crews placed 1,113 waterfowl nesting structures and 3,590 other types of nesting structures on private lands.
- Mixed seed packets were provided to cooperators.
- The pruning or releasing of 105 separate fruit trees was performed on old orchards.
- Warm season grasses were planted on 222 acres of marginal pasture or cropland.
- Habitat improvements such as wetland creation, food plot construction or specific wildlife management plan development occurred on 440 acres.

To further improve habitat on private land, there are currently five biologists working in the regions that are funded by the State Wildlife Grants and Landowner Incentive Programs. Pittman Robertson Wildlife Restoration Grant Funding provided in fiscal year 2007-08 was the second largest amount ever received in Pennsylvania — \$11,453,294. State Wildlife Grants Program funding for the Commission was \$1,002,110.

Through our participation in the Environmental Review Committee (ERC), we were



2007-08

able to consider associated wildlife habitat impacts and ultimately recommend approval for the creation or restoration of a total of 25 acres of wetlands on private lands through the U.S. Fish and Wildlife Service's Partners for Wildlife program and the Department of Environmental Protection's Wetland Replacement Fund program.

In addition to the Cooperative Public Access Program, other lands under agreement include: State Parks, 283,000 acres; State Forests, 2,100,000 acres; National Forest Lands, 513,161 acres; National Recreation Areas, 24,732 acres; National Wildlife Refuges, 6,116 acres; U.S. Army Corps Lands, 35,224 acres; other, 11,846 acres.

The Conservation Reserve Enhancement Program (CREP) continues to enhance thousands of acres of wildlife habitat on private lands in Pennsylvania. Since June 2000, 198,713 acres of wildlife habitat have been planned through CREP. Last year, the Farm Service Agency (FSA) received 1,692 CREP applications from more than 800 landowners, who offered to enroll 15,250 acres in conservation cover plantings. PGC and Natural Resource Conservation Service (NRCS) wildlife habitat biologists completed 1,505 applications and wrote 1,488 conservation plans encompassing 20,133 acres. The FSA approved 1,332 contracts on more than 21,061 acres.

The PGC strives to add a minimum of 3,000 acres to the State Game Lands system each year. In fiscal year 2007, the Commission acquired 1,609 acres, bringing the agency's total State Game Land acreage to 1,437,499. The State Game Lands system includes 305 separate tracts in 65 counties. During this period the Commission received seven land donations ranging in size from 1.1 to 100 acres. These generous gifts benefit wildlife and hunters and trappers, as well as other citizens who enjoy natural areas.

Acquiring interior holdings, indentures and access into existing State Game Lands is always a high priority for the Commission. In FY 2007-08 the Commission acquired three interiors, one indenture and five properties that will provide new access routes into existing State Game Lands. Unfortunately, insufficient funding in recent years has limited our ability to acquire more of these types of highly desirable tracts. Once these tracts are sold and developed the Commission has lost the opportunity to close out these in-holdings and straighten out our boundary lines.

There was one new SGL created during the fiscal year. SGL 93 (1,453 acres) was created when the agency acquired land in Somerset County, immediately north of the proposed site of the Flight 93 National Memorial. This new State Game Lands was designated as SGL 93 in honor of Flight 93's crew and passengers. The previously numbered SGL 93, located in Clearfield County, was renamed SGL 331.

With the emphasis to link the Commission's lands records to a Geographic Information System (GIS), the Bureau of Wildlife Habitat Management, working closely with the Bureau of Automated Technology Services, has begun a GIS compatible lands records database. The creation of this new database will allow the Commission to compare data in our previous databases and discern any potential discrepancies in acreage changes due to corrective surveys being completed after the initial consummation, boundary line agreements and other recording errors.

Several retirements in the Surveying Section precipitated realignment of the field survey crews from four 3-person crews to six 2-person crews. The goal is to eventually have one 2-person survey crew geographically located in each of the six PGC regions to improve efficiency of operations and reduce travel time. There were 5,943 acres and 83 miles of State Game Lands boundary lines surveyed during the fiscal year.

Thirty-two State Game Lands maps were updated, nineteen SGL maps were con-

verted from pen and ink to digital format and nine SGL maps already digitized were updated.

Through our participation in the Environmental Review Committee (ERC), in FY 2007-08 we were able to review and comment on potential wildlife habitat impacts, and ultimately recommend approval for the creation or restoration of more than 52 acres of wetlands on private lands and more than eight acres of wetlands on State Game Lands through the U.S. Fish and Wildlife Service's Partners for Wildlife program.

Local government bodies received \$1.20 per acre in-lieu-of taxes on State Game Lands, as required by the Act of May 17, 1929, as amended. During the fiscal year, \$1,720,721 was divided into three equal payments to the county, school district and township where such lands are located.

Since the creation of the PGC Wind Energy Voluntary Cooperative Agreement, 20 wind development companies have become cooperators, thus agreeing to avoid, minimize and potentially mitigate any adverse impacts the development of wind energy on private lands may have on the state's wildlife resources. PGC staff attended 29 joint agency meetings, including meetings of the PA Wind & Wildlife Collaborative, 12 joint agency meetings and 5 other wind meetings. Forty-seven wind energy development projects were reviewed for potential impacts to special concern species, natural resources and State Game Lands. Due to the increased workload the PGC hired four limited term wage positions through a state wildlife grant (SWG).

Staff attended seven field views and 55 meetings involving wind energy development on private lands in regards to potential impacts to wildlife. Recommendations were provided to avoid and minimize impacts on wildlife and unique wildlife habitat.

Staff reviewed and commented on 184 transportation projects (PennDOT, Turnpike, airports, rail) concerning species of special concern with 110 potential impacts. Habitat or presence/absence surveys were conducted for eight projects. The surveys were conducted for bald eagles, peregrine falcons, least bitterns, ospreys, great blue herons, potential bat hibernacula and upland sandpipers. The survey results were used to avoid, minimize or mitigate (for unavoidable) impacts.

The State Game Lands Banking Agreement was adopted as a partnership with the Pennsylvania Department of Transportation (PennDOT) to provide advance mitigation (land) to offset permanent acreage losses to State Game Lands, primarily from bridge replacements or minor road widening projects. The partnership will streamline the process and improve the cost efficiencies between the agencies. Currently, potential banking sites are being reviewed and considered under the Agreement.

The PGC has a Memorandum Of Understanding (MOU) with the Pennsylvania Department of Transportation that allows them to create wetland mitigation sites on State Game Lands at no cost to the PGC.

Staff reviewed and commented on a total of 786 private development projects with 539 potential impacts to species of special concern. Surveys were conducted on 15 projects to avoid adverse impacts to those species of special concern. Avoidance measures were required or were recommended on 61 of the projects to avoid or minimize impacts to 2



Lori Richardson

BEN JONES planting a warmseason grass plot at the Game Commission headquarters in Harrisburg. The plot will showcase the habitat work being done on State Game Lands.



2007-08

federally listed species, 19 state-listed endangered or threatened species, 14 state listed species of special concern, and wetlands. Avoidance measures were required on 18 of these projects to avoid adverse impacts to upland sandpipers, short-eared owls, dickcissels, northern harries, northern myotis, bald eagles, Swainson's thrushes and march wrens.

Maintaining optimum habitat diversity on game lands is an important goal of our Forest Habitat Management Program. Fifty-five forest habitat management projects containing 5,663 acres were offered for

bid to commercial timber harvest operators during the past fiscal year. Timber contractors harvested 4,944 acres that yielded more than 18.2 million board feet of logs and 96,939 tons of pulpwood. These operations generated \$11,815,603. This was a decrease of 1,298 acres, \$3,290,193 and 4.1 million board feet from the previous year, and can be attributed to a continued declining trend in timber market conditions.

Additional forest habitat improvement projects, such as crop tree releases and intermediate thinning, resulted in 829 additional acres of improved habitat. Also, the forestry staff provided support to the ever-growing mineral recovery and right-of-way operations on 440 acres of State Game Lands. This brings the total for acres treated this year from the forest habitat management program to 6,213 acres.

There were 1,722 acres treated with herbicide to remove ferns, striped maple, spicebush, low quality beech brush, and other non-native and invasive plant species that impede establishment of more beneficial tree species.

A road network sufficient to carry heavy equipment and comply with the Clean Streams Act and other environmental protection regulations was designed and supervised by our regional forestry staff. Logging contractors completed 57 contracts during the year, improved 69.9 miles of haul roads, constructed 8.2 miles of new roads (which became wildlife food strips after seeding), and placed 120 culverts. The value of these on-site infrastructure improvements exceeded \$717,664 and were costs borne by the timber operator and thus deducted from the totals of the timber bids. Additionally there were \$701,323 worth of improvements completed through timber sale contracts, including landing and skid road seeding with wildlife mixes, parking lot construction, gate installation, and deer enclosure fencing.

The emphasis of the agency has been on putting habitat on the ground. Habitat improvement cuts resulting in timber sales on game lands created various stages of plant succession and regenerate forest stands. Forest management techniques such as regeneration cuts, select thinning, and prescribed fire provided a habitat mosaic across the landscape. Depending on local wildlife needs, permanent herbaceous openings were managed as fawning grounds, nesting and brooding areas, or as seasonal food plots. In certain areas of the state, wetlands were managed for waterfowl and shorebirds through seasonal flooding. This interspersion of forested, herbaceous and wetland cover types on game lands created habitat for many wildlife species.

Pheasants Forever donated food plot seed valued at \$20,672 and native grass seed valued at \$5,400.

The agency's Howard Nursery in Centre County produced and distributed 1,982,525 tree and shrub seedlings for wildlife food and cover plantings, and 868,875 of the seedlings distributed were sold for \$136,000. Increased advertising and public program awareness efforts resulted in improved sales of seedlings and nesting boxes. The nursery propagated 41 species of important food and cover plants that included 1,015,275 in conifers and evergreens for thermal cover and 974,750 deciduous trees and shrubs.

In partnership with the Wildlife for Everyone Foundation, a new program — Seed-



PGC forest technician JAKE SCHEIB takes a tree diameter at breast height (DBH) measurement as a key component in the PGC's Forest Inventory and Analysis Program.

ling for Schools — distributed a total of 55,000 free seedlings to 312 schools.

The wood shop produced and shipped 7,820 bluebird boxes, 15,188 bluebird box kits, 634 wood duck boxes and kits, 360 other nesting boxes, 60 custom signs, 75 boundary line signs, 8 welcome signs, and

6,063 bulletin boards and backboards for use on game lands and cooperative access properties. Wood products are also available for purchase by the public on the agency's website. There were 115,390 private lands public access and game lands information awareness signs acquired and distributed to the regions for distribution and posting.

The Forest Inventory and Analysis Program, which was established in 2005, is now in its third season of data collection. This program is critical for accurate assessment of the forested areas of the State Game Lands. As of June 30, 2008, 457 permanent assessment plots have been established. With the goal of 1,000 permanent plots established after a 5-year cycle, the section is on pace to achieve its goal. These plots will be re-assessed on a 5-year cycle to determine changes in growth, health and species composition of State Game Lands forest habitats and will provide valuable habitat planning information.

In August 2007, PGC field staff provided reports of nearly 93,000 acres of forest habitats on Game Lands that were impacted by Gypsy Moth defoliation. After a thorough review, approximately 44,500 acres were prioritized for suppression due to their habitat values at cost of nearly \$1.4 million. The agency has been unable to adequately budget for pesticide spraying (gypsy moths) in the past, because of this the Commission has now reached critical need to spray in these areas or risk losing the forest habitat and associated revenues.

Despite the successful reduction of deer population density impacts to forest habitats, there remains some areas in need of deer exclosure projects. Contractors erected 8-foot-high woven wire fences around 219 acres of recently harvested habitat areas to protect the susceptible new growth from excessive browsing. Funding for such projects is limited, and the Commission remains at risk in those areas to achieve its forest management goals.

Staff inspected six high hazard dams for annual DEP-Dam Safety requirements, and coordinated efforts of 10 PGC crews in facility maintenance projects with a budget of \$111,500. Staff also:

- Completed 10 bridge projects including 8 bridge replacements and 2 deck repair projects
- Removed one dam that was no longer needed
- Completed repair projects on five dams
- Completed one road repair project
- Constructed a new brooder house at the Loyalsock Game Farm
- Completed the renovation of the electric system for the water supply at the Middle Creek Visitor Center
- Completed lead remediation at 14 shooting ranges



2007-08

- Completed the safety and facility upgrade projects at six shooting ranges

The Board of Commissioners approved eight leasing actions during the FY 2007-08. Four of these approved actions were oil/gas development leases, which garnered a total bonus value of \$5,786,125 and enabled the Commission to acquire a total of 6,663 acres of land to be used for the benefit of wildlife and sportsmen. The Commission also approved four coal mining leases, which include the reclamation of approximately 7,600 linear feet of abandoned highwalls, the reclamation of approximately 28.2 acres of abandoned mine spoils and daylighting of 15.3 acres of abandoned underground mine workings.

The Oil/Gas and Mineral Development Section reviewed and coordinated with field personnel and industry a total of 246 oil or gas well locations on State Game Lands during FY 2007-08. Total revenues generated during FY 2007-08 from oil/gas and mineral recovery operations were \$3,150,992.81. The Oil/Gas and Mineral Recovery Section currently manages 46 different companies operating a total of 93 lease agreements on 51 State Game Lands.

The Oil/Gas & Mineral Development Section developed new oil/gas and mineral revenue tracking system which has enhanced reporting capabilities on revenues generated through the oil/gas and mineral section. The enhancements include documentation of royalties and production data on each individual gas well, oil well, or mining permit on a monthly basis. This database has been implemented July 1, 2008, for 2008-09 fiscal year.

A total of 540 mineral parcels (more than 330,000 acres) distributed among 50 different game lands complexes were created in our GIS database during FY 2007-08. Our oil, gas, coal and mineral ownership was also researched and/or added to that database for 421 of those mineral parcels. A total of 87 mineral lease boundaries were created in our GIS database in FY 2007-08. A total of 2,675 well locations on state game lands, including their associated well attribute data, were also added to, or updated in, the GIS database.

Expand and improve communication, education and outreach for public awareness and understanding of wildlife resource management.

During this past year, 721 basic Hunter-Trapper Education (HTE) classes were conducted across the state. These classes produced 30,637 new students, who are now ready to join the ranks of Pennsylvania's existing hunters and trappers. The primary goal of this training is to produce safe, responsible, knowledgeable and involved hunters and trappers.

The second wave of classes transitioned to the new HTE curriculum in 2008. This wave comprises another third of the state, bringing the total number of counties, which are teaching this new curriculum, to 54. The new curriculum strives to meet national standards for basic hunter training as established by the International Hunter Education Association (IHEA). The curriculum appears in three instructional formats: tradi-

tional classroom lecture/demonstration course, classroom instruction with skills station or independent study opportunities. By using three separate formats, flexibility has been incorporated into the HTE program to accommodate the needs of students and the capabilities of our volunteer instructors and the agency's field staff.

The format incorporating skill-based training is proving to be the most effective and also the most enjoyable for students. In addition to the classroom component, students receive one-on-one instruction in a small group setting. A total of four stations are conducted at which students learn to load and unload firearms, handle firearms safely in hunting situations, decide when to shoot and where to aim at game animals during video simulations, and basic marksmanship skills. A hands-on approach is used throughout, as students handle real firearms.

Independent study classes are now being conducted around the state for students 14 years of age and older. These students study online then attend a short session where they will participate in a lesson on hunting laws and regulations. At the conclusion of the lesson, students take the standard HTE written examination. On average, the independent study component takes about 8-10 hours for the student to complete. The actual class is about two hours in length. During this past year, the minimum participation age for this format was lowered from the original age of 17. This reduction is designed to expand the opportunities for students, who desire to use this training method.

The final wave of Pennsylvania counties will transition to this new curriculum in 2009. By the end of the year, all HTE classes across the state should be on board with the new curriculum. At that point, all hunter education students across Pennsylvania will benefit from the latest training methods, techniques and equipment to further their participation as safe, knowledgeable and responsible hunters and trappers.

The PGC provides advanced hunter and trapper training in the form of its voluntary Successful Bowhunting course and its Cable Restraint Training course. The Successful Bowhunting course, consisting of a 6-hour independent study module and a 1-day, 8-hour class, continues to be popular. During the past year 494 students were certified at one of the reported 23 classes statewide. The curriculum, designed to meet IHEA standards for bowhunter training, features hands-on training for both new and veteran bowhunters. The training is designed to improve the student's skills and abilities, thereby increasing enjoyment and success. Big game anatomy and shot placement, shooting exercises, hunting methods and techniques, big game recovery and care, treestand use and safety, basics of using a map and compass together with distance estimation are but a few of the lessons conducted at the 1-day class. Much of the training is held outdoors in a wooded environment. Students who successfully complete the training receive certification that is recognized and accepted throughout North America.

Four years ago, the Game Commission authorized the use of cable restraint devices to capture coyotes and foxes during the later part of the furtaking season. Included in this action was a requirement for mandatory training of all persons who desire to use these devices. This 4-hour training class is designed to produce safe, knowledgeable and



Lori Richardson

EDUCATORS at a Schoolyard Habitat Workshop at Nolde Environmental Education Center in Reading pose behind a habitat they created during the workshop in June.



2007-08

responsible furtakers. During the past year 23 classes were conducted and 801 students were trained and certified. This curriculum is scheduled to become part of a more comprehensive Furtaker Education program in 2009.

Another goal of the agency is to increase hunter and trapper recruitment, with a focus on youth, women and minorities. Independent study options for the agency's hunter education programs allow a more customer friendly approach. Potential hunters and trappers will find it easier to meet training requirements as they pass through the portal of hunter education into a life-long hunting or trapping experience. Independent study options, whether Internet-based or printed workbooks, allow students to learn at their convenience, a real plus in today's busy world.

Further refinements were made to the new Hunter Education Registration and Reporting System (HERRS), an automated Internet-based system designed to post class information on the web and allow students to register for hunter education classes online. HERRS produces a comprehensive listing of all hunter and trapper education class opportunities on the agency's web site and enables students to actually register online for the class of their choice. Customer convenience and operational efficiency are the greatest features of this new online registration service.

An extensive amount of work is being invested in developing and producing an online, independent study version of our basic Hunter-Trapper Education curriculum for deaf and hard of hearing students. Utilizing sophisticated computer software, the current online course, *Today's Hunter and Trapper in Pennsylvania* was recorded and enhanced with visual learning aids and a picture-in-picture video of a sign language interpreter. This project, designed to make hunter education more accessible to deaf and hard of hearing students, is the first of its kind in the nation.

Game News continues to be the primary voice of the Game Commission, and the hunting stories, natural history content and, as always, Field Notes, remain popular with many readers, not just in Pennsylvania, but also throughout the country and to our servicemen and women throughout the world. *Game News* also features plenty of articles about Game Commission research and management projects, law enforcement accounts by our WCOs, and as much agency news as ever before.

Game News is also a popular part of the agency's website. Every month we feature our cover and provide descriptions of articles, the editorial, some Field Notes, news items, and entire features about law enforcement accounts and other agency programs.

And new this year, we're pleased to announce the posting of the entire issue of *Game News* and the *2008-09 Hunting & Trapping Digest* online, using new technology designed to put print media online. To see what we're talking about, go to www.pengamenews.com. To view the Digest, click on the text under the cover icon. To view *Game News*, click on the text under the *Game News* cover icon and enter subscriber number. Currently, this electronic version of the magazine is available to subscribers, school libraries and to cooperators enrolled in PGC public access programs. The online version will allow readers to conduct searches, go directly to particular features and, by using a zoom feature, make the type larger and easier to read. Broadband Internet access works best.

One writer won a craft award from a professional outdoor communication organization for their work in *Game News*. From the Pennsylvania Outdoor Writers Association, Harvey "Bumper" Bauer received the "Wild Turkey Award" sponsored by the PA Chapter of the NWTf for "Thrills and Timber Ghosts," published in the March 2007

issue.

The PGC resumed, after a 7-year hiatus, with big game measuring sessions, holding scoring sessions in all six regions of the state in June. Hunters who took the top trophies during the recent scoring session period were recognized at an awards banquet in conjunction with the Pennsylvania Outdoor Writer's Association's fall conference in September. *Game News* staff coordinate Pennsylvania's Big Game Scoring Program.

In addition to the magazine, a host of other brochures and publications, including the annual regulation digest, are produced by *Game News* staff.

The Game Commission continues to offer a wide variety of news releases and features stories about wildlife, hunting and trapping to the news media and public. In January 2007, the Game Commission began offering TV news stations weekly 1-minute programs called "Pennsylvania Wildlife Moments." These segments covered a range of topics from a variety of wildlife found in our state to hunting safety tips to wildlife habitat programs. In June 2008, the agency launched a partnership with Radio PA to offer daily (Monday through Friday) radio segments called "Outdoors PA with the Pennsylvania Game Commission."

Internet sales transactions of Game Commission products amounted to 8,745 during the 2007-08 fiscal year, and counter sales totaled 42,149. Total sales during the fiscal year were \$400,235 (\$476,580 during the 2006-07 fiscal year). In addition, sales recorded at the Eastern Sports and Outdoors Show amounted to \$26,557.

Donations to the agency, after creating a section on the website to do so four years ago, amounted to \$18,900 during the fiscal year, and contributions continue to grow.

Starting this February, orders will be taken for the third year of the 5-year turkey call series and upland game bird knife series, with patches and prints. The first and second years of these items were a huge success.

New items include: the *Birds of PA* guide book, written by Franklin Haas and Roger Burrows; a poster, "Connect with Wildlife;" and bumper stickers, "Proud to be a PA Hunter," and "Proud Parent of a New Hunter." All VHS cooking videos are now available on two separate DVDs. each DVD has three cooking series.

Conservation education continues to develop new resources and opportunities for teachers and students to explore the diversity of wildlife in Pennsylvania. The Commission is pleased to announce the completion of "Pennsylvania Biodiversity," a curriculum supplement for middle and high school teachers. Pennsylvania Biodiversity offers background information and hands-on activities designed to help teachers and students discover the diversity of wild species in our state, explore interconnections among wildlife, culture, economics and the environment and examine local and global issues relating to biodiversity. Pennsylvania Biodiversity helps address state standards and is available through workshops or direct purchase.

Wildlife Education Specialists and Supervisors, along with Information and Education Specialists and WCOs, continue to offer teacher training workshops and student programming throughout the state. Student programs vary with grade level and classroom curriculum. Programs are designed to complement classroom activities and to help teachers address Pennsylvania's Environment and Ecology Standards. In addition to classroom programming, the Commission continues to develop and conduct the wildlife station at the county and state Envirothons. This year, the state Envirothon was held at the Ag Progress Days Complex at Penn State University in State College.

Project WILD, a national conservation education program sponsored by the PGC, remains strong in our state. This year more than 1,600 educators participated in basic WILD and Advanced WILD workshops. Basic workshops address wildlife biology, eco-



2007-08

logical concepts and wildlife issues. The advanced workshops focus on specific species, issues or topics. A new Advanced WILD workshop, entitled WILD about Watersheds, was offered in partnership with Wildwood Lake Nature Center and the Bureau of State Parks. During this 2-day workshop teachers explored the concepts and issues relating to watersheds and watershed quality and spent a day on the Susquehanna examining water quality, releasing shad and learning about the significance of the river to people throughout history. The Commission also

offered "WILD about Owls," again this year at the Middle Creek Wildlife Management Area. Participants of WILD about Owls explored issues and natural history of owls throughout the world with a special emphasis on the barn owls and had the opportunity to get up close and personal with barn owls as biologists banded young owlets. Once again, the PGC received a grant from the Rocky Mountain Elk Foundation to conduct a 2-day WILD about Elk workshop. This workshop took place in the Northcentral Region and featured activities and presentations conducted by Commission educators, biologists, land managers and WCOs. In addition, participants were able to go out in the field to view elk and to study land management practices for elk. The Commission also offered WILD about Schoolyard Habitats this past year. Working with Nolde EE Center, Bureau of State Parks, teachers participating in this workshop actually built a small habitat area while learning techniques and native plant selections that can make an area conducive to student learning and, at the same time, attract birds and butterflies to the schoolyard.

An additional 100 plus educators participated in "Pennsylvania Songbirds" and other conservation education workshops sponsored by the Commission. Pennsylvania Songbirds was developed by the Game Commission in partnership with DCNR, Bureau of State Parks and Audubon Pennsylvania. This curriculum supplement addresses songbird biology, ecological concepts and songbird issues and contains background information and activities that help address Environment and Ecology Standards. All teacher training workshops offered by the Game Commission are approved for Act 48 hours for teachers.

The new Seedlings for Schools program was piloted this year by the Commission's Howard Nursery and the Conservation Education Division. Tree seedlings along with information and activities found in a teacher's guide and in students activity sheets were sent out to participating schools. The cost of shipping of materials and trees was provided through the generosity of Waste Management; Mealey's Furniture; Pheasants Forever, Chapter 603; USFWS-Partners for Wildlife and the Wildlife for Everyone Foundation. More than 55,000 seedlings were provided to schools and students in the first year of this program.

The Commission continues to participate in the Governor's School for Environment and Ecology for Teachers, directed by Dr. Patricia Vathis, Department of Education, Office of Environment and Ecology. This week-long course offers background knowledge, field experiences and hands-on activities to help teachers address the Environment and Ecology Standards. This year Commission wildlife educators partnered with educators from DCNR, Bureau of State Parks to offer workshops entitled "PA Biodiversity," and "Pennsylvania Songbirds." In addition, Commission educators offered Wildlife Forensics and Endangered Species workshops and an evening session on the new Pennsylvania eBird.

Protect and enhance our hunting and trapping heritage.

The Bureau of Wildlife Protection continues to work toward our mission of protecting Pennsylvania's wildlife through law enforcement, seeking effective legislation and developing regulations. During this reporting period bureau staff worked extensively with the Chairman of the House Fish and Game Committee, Ed Stayback, and his staff, to develop house bill 2205, which would dramatically enhance the penalties in the game and wildlife code for the most egregious offenses. The PGC testified at hearings in February and September 2008 in support of the bill. Although the bill did not make it through the legislative process during this session, the PGC will continue to work toward getting the bill reintroduced and voted on in the next legislative session. Sportsmen support for the legislation has been widespread, and the bureau wishes to thank both the Pennsylvania Federation of Sportsmen's Clubs and the United Bowhunters of Pennsylvania, who both testified in support of this legislation, which will make it a felony to kill five or more big game animals out of season, at night with a light, or over the bag limit, with the possibility of imprisonment. It will also deter chronic offenders because a second offense of poaching a big game animal will be upgraded to a felony offense.

Other legislative efforts continue, such as obtaining the statutory authority for Pennsylvania to join the Interstate Wildlife Violators Compact and cooperate with the 42 other states that have achieved legislation to participate in the program, which provides reciprocity for license revocations between states. In other words, a poacher who loses his license in one state loses license privileges in all states that are a member of the compact. Legislation was introduced again this reporting period by Representative Mark Gergley, however, it did not pass this session. The concept of Pennsylvania joining this compact is also widely supported by sportsmen, as Pennsylvania is currently one of only eight states that is not a member, and therefore has the potential of becoming the "poacher's paradise" for those who have lost their licenses in most other states, but can still purchase a license in Pennsylvania.

Enforcement statistics once again show that our officers are doing an outstanding job of protecting Pennsylvania's wildlife with professionalism. Officers conducted more than 160,000 enforcement contacts, including more than 80,000 field checks of hunters in the field. Out of this significant



KYLE VINCENT IANELLI, Philadelphia, got this nice 6-point with his bow. The 10-year-old, who was hunting with his "pop-pop" VINCENT VALLORANI, certainly appreciates the Game Commission's Mentored Youth Hunting Program. Kyle said his grandfather started taking him out in the woods when he was five, and that he practices often shooting his bow.



2007-08

level of law enforcement activity an enforcement contact to complaint ratio of less than 1/1000 of a percent was noted, indicating the professionalism with which officers are performing their duties. The high level of activity resulted in officers detecting 16,601 violations. Officers issued 6,441 citations for violations, but issued 10,160 warnings, indicating that they used a great deal of enforcement discretion in applying the game law. As another indicator of this good discretion and the officers' technical competence, once again this year the successful prosecution rate was 96 percent, maintaining the 10-year average of more than 95 percent of cases that officers cite or make an arrest result in a successful prosecution.

Officers also have shown that they focus their efforts on those violations with the most impact to the wildlife resources by the that fact that yet again this year, the number one violation officers prosecuted, with 847 successful prosecutions, was the unlawful taking of game or wildlife.

The Special Investigations Unit conducted many investigations into the illegal sale of wildlife, resulting in more than 50 successful prosecutions for black marketing of wildlife. Unfortunately, officers have noted an increasing and disturbing trend in "thrill killing" incidents, where an individual or group kills large numbers of deer or other animals without any intent of using them. In one case a group of three poachers rode around until they located a herd of deer, then all three would open fire randomly into the herd, killing and wounding as many deer as possible and then just leaving to find another herd. A different group killed or wounded more than 50 deer in a period of several weeks and never made any attempt to retrieve any of the animals. Both groups were apprehended by officers and subsequently prosecuted, but these incidents are a clear indication of why more severe penalties are needed in the game and wildlife code to deter this type of activity, and more appropriately, penalize those who do engage in wanton destruction of wildlife.

Another major project of the bureau this year was the enhancement of the Turn in a Poacher program (TIP). Advances were made to the system to expand reporting options to an online report form and that system has been highly successful in increasing the amount of tips we receive to investigate. Almost half of all the reports that come in to the TIP program now are submitted in the electronic format. Officers thoroughly investigate all information received, and that resulted in charges being filed about 20 percent of the time from information received in the program, including cases with poachers killing multiple antlered deer. Even the information that may not have immediately resulted in a successful investigation is stored for future reference, and officers patrol the areas where poaching was reported with some additional intelligence that may help them in the future. The willingness of the public to help protect wildlife is critical to the accomplishment of our mission. Each WCO has an average district of more than 300 square miles to cover and, quite frankly, needs all the extra eyes and ears they can get to provide effective protection. Technology has made reporting poachers not only easier, but far more timely, as many hunters carrying cell phones in the woods with them. The Bureau of Wildlife Protection encourages sportsmen to add the region office phone number for the area they hunt into the speed dial on their cell phones so that if a violation is observed it can be quickly reported, which is often the most critical factor in the success of an investigation. Visit the PGC website and click on the link for "help protect wildlife" to get region office numbers and the TIP hotline, as well as more information on what you can do. Information on the TIP program can also be found on pg. 94 (region office phone numbers on pg. 3) of the 2008-09 *Hunting & Trapping Digest*.

Develop a sustainable funding structure that supports the agency's mission and identity.

The Bureau of Administrative Services is responsible for providing support operations to the many functions of the Game Commission and to ensure a modern license system. Following is an overview of these responsibilities by division within the bureau.

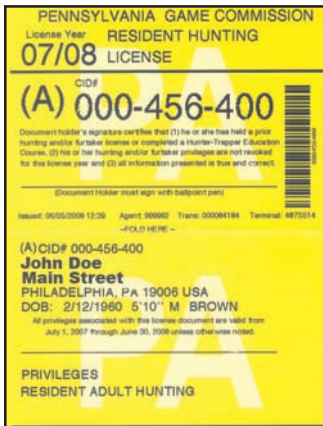
The License Division is responsible for directing all Commonwealth hunting license issuing agent activity and overseeing the collection and deposit of license revenue generating more than \$33,000,000 annually. This division coordinates the design, acquisition and allocation of hunting licenses through our network of issuing agents and is responsible for the audit of more than 700 license accounts annually. In addition, the License Division recommends license related regulatory proposals for adoption by the Commission.

In cooperation with the Bureau of Automated Technology Services and the Fish and Boat Commission, the License Division developed requirements and specifications to acquire the Pennsylvania Automated License System known as PALS. The division is responsible for coordinating the transition of license issuing agents from the current paper-based system to PALS. The License Division also works with various state agencies, federal and state legislators, the U.S. Fish and Wildlife Service, county treasurers, commercial issuing agents and the public on issues involving licenses, regulations and e-commerce license sales.

The Human Resources Division is responsible for administering human resources programs at the Game Commission. These include recruitment and placement, classification and pay, personnel transactions, employee benefits, time administration, worker's compensation, labor relations, as well as the safety program, commercial driver's license random drug testing program, code of conduct and financial disclosure, and many other human resources related activities. The Game Commission's Equal Employment Opportunity Officer also is housed in the Human Resources Division and is responsible for

encouraging the development of a diverse work force and ensuring a workplace that is free of discrimination and harassment. In addition, the Human Resources Division conducts employee training pertinent to human resources topics.

The Fiscal Management Division is responsible for budget control, fiscal management, revenue and re-fund management, contracting and purchasing, contract compliance and similar miscellaneous duties. The budget duties include the preparation of the annual budget request, appropriation hearing committee materials, re-budgeting and serving as agency liaison with the Governor's Budget Office. The fiscal management duties include the determining the agency's fiscal position; projecting costs and revenue for the remainder of the fiscal year; recommending cost restrictions and cutbacks where deficits are projected; balancing and reconciling augmentations and appropriations with the approved budget; reviewing all vendor purchase



HERE'S an example of a basic Resident Adult Hunting license purchased through the Pennsylvania Automated Licensing System (PALS).



2007-08

ment.

The Contracts and Procurement Division is responsible for ordering supplies and services for all bureaus and regions through the creation of a purchase order. Obtaining supplies and service through the bid process requires requests for proposal, which are sent to vendors and administered within the Commission for supplies under \$20,000 and services under the \$250,000 threshold. Anything above the thresholds is administered through the Department of General Services. The division also administers the Advancement Account, VISA (including requests for new cards, changes and deletions), reconciles monthly statements, undergoes internal and external audits, and handles all system problems for the Game Commission's bureaus and regions, and vendors. Grants, inter-agency agreements and contracts come through this office to be checked for compliance and proper signature authorization. This division is the first contact in the case of invoices, purchase orders, agreements, grants and contract problems with the Governor's Budget Office or Comptroller Operations Office.

The mailroom sorts and distributes all incoming mail, parcels, UPS and Fed Ex, and prepares and meters outgoing mail. Mailroom staff also print news releases, brochures and licenses sold on the Internet, as well as other agency publications.

Supply room personnel order and distribute office supplies and forms that are obtained from General Services or are on state contract with approved vendors.

The warehouse operation is responsible for the receiving, storing and disbursing materials such as law enforcement uniform equipment, non law enforcement wearing apparel, wildlife notes, HTE materials, paper, envelopes, and hunting licenses and supplies, such as forms, regulation digests and antlerless applications.

requisitions and invoices for payment; and serving as the liaison to Office of Administration, Comptroller's Office and Bureau of Financial Manage-

The following licenses were issued for the 2007-08 license year:

Resident Adult	665,719
Resident Junior	41,743
Resident Junior Combination	51,533
Resident Senior	31,615
Resident Landowner	1,221
Resident Military	2,710
Nonresident Adult	54,192
Nonresident Junior	2,274
Nonresident Junior Combination	645
Nonresident 7-Day	2,524
Resident Archery	255,188
Nonresident Archery	11,653
Resident Muzzleloader	188,207
Nonresident Muzzleloader	7,847
Resident Migratory Game Bird License	104,197
Nonresident Migratory Game Bird License	4,684
Resident Antlerless Deer	819,231
Nonresident Antlerless Deer	23,114
Resident Adult Furtaker	26,646
Resident Junior Furtaker	419
Resident Senior Furtaker	740
Nonresident Adult Furtaker	225
Nonresident Junior Furtaker	2
Resident Bear	130,675
Nonresident Bear	4,909
Senior Lifetime Hunting	2,814
Senior Lifetime Combination	3,922
Senior Lifetime Combination (Upgrades)	263
Senior Lifetime Renewal Hunting	63,273
Senior Lifetime Furtaker	1
Resident Spring Turkey	8,517
Nonresident Spring Turkey	277
Elk (17,270 applications)	50
Bobcat (6,064 applications)	1,010
DMAP (coupons received)	32,377
Total Revenue Received:	\$35,510,948

Recruit, develop and maintain an effective workforce.

The Training Division is responsible for facilitating, developing and documenting agency wide training for all employee classifications. A large portion of this responsibility involves initial training and regular updating and qualification of our law enforcement officers. The training division houses the Ross Leffler School of Conservation, which is the training school for the commonwealth's Wildlife Conservation Officers.

The Training School is a multiple use facility. All six bureaus and personnel from all regions used the facility this fiscal year, with more than 1,100 personnel attending training sessions there. Here are some highlights of the training division's accomplishments for this fiscal year:

A major accomplishment was the training and graduation of the 27th Wildlife Conservation Officer class. The class enrolled April 1, 2007, and graduated on March 8, 2008, adding 22 new officers to the field ranks. The agency had not graduated a class since 2002. Members of the class were assigned to all six field regions to fill vacant districts.

The Training School staff develops the course work and the class schedule, solicits and schedules instructors, reviews and approves lesson plans, contracts vendors for services, arranges for facility maintenance and improvements, purchases equipment and supplies and prepares and delivers classroom and field instruction. The cadets are evaluated regularly and the progress of each cadet is documented and reviewed. The staff is also responsible for daily operations, maintaining a highly structured adult learning environment, and discipline of the cadets.

The 2008 Deputy WCO class was held in May 2008. Twenty six new deputy candidates from around the commonwealth were brought to the training school for an intensive 7-day basic training and orientation course. The Training School staff updates and maintains instructional materials and provides much of the classroom instruction for this class, and also develops written examinations and standards for certification. The Training Division sent out 155 information packets on becoming a deputy this year. This informational packet is continuously reviewed and updated and the deputy recruiting process is reviewed to encourage efficient recruitment of qualified candidates.

The Training Division produced the 2008 Officer Survival Skills manual, which includes Firearms, Use of Force, Defense and Control Tactics and Verbal Skills instruction.



In cooperation with the Bureau of Wildlife Protection, the 2008 Legal Updates manual was produced. This course provides updates in statutory changes, new case law and current issues and refresher training in search and seizure. Twelve region instructors were trained in this material. These manuals were distributed to field level instructors and to

DEPUTY WCOs on the firing line qualifying with their sidearms.



2007-08

all enforcement officers.

Approximately 70 in-service training sessions were held statewide to complete mandatory officer skills training for approximately 575 sworn officers, including 385 active deputies. This training includes Firearms, Defense and Control Tactics, Hazmat, First Aid/CPR, Verbal Skills, Legal Updates and Use of Force.

All salaried conservation officers were certified as Deputy Federal Wildlife Agents

by the USFWS.

Game Commission firearms instructors were recertified as Glock pistol armorers.

An estimated 600 non-enforcement employees attended in-service training sessions on topics such as First Aid/CPR, Hazmat, ATV Safety, Chainsaw Safety, Right to Know, Defensive Driving, Chemical Immobilization of Wildlife, Deer Management, Wildlife Disease Surveillance, Wildland Fires, Game Lands Planning and Pesticide Safety.

Late in 2007, the preparation began for the testing and selection of the 28th WCO cadet class, but due to budget constraints and a statewide hiring freeze, that has been put on hold.

The division processed a total of 302 out service training requests this fiscal year with a total registration cost of \$48,762 and a total expense of \$130,819. Twenty three percent of the registrations were “no fee” registrations and 69 percent were \$100 or less.

Approximately 85 managers and supervisors received development training through the Office of Administration in-service programs. The division serves as the point of contact for the agency with the Office of Administration, Human Resource Development for mandated computer based training courses in Discrimination Awareness, Sexual Harassment Prevention, Drug Free Workplace, Workplace Violence, Ethics in the Workplace, Emergency Awareness, Security Awareness, Information Technology Acceptable Use, Equal Employment Opportunity Policy, etc.

The Training Division coordinates the agency “Right to Know” program required by state and federal law. Division staff conducted several Right To Know classes for new employees and conducted an agency wide annual review of Right To Know in-service training and record keeping compliance. In other actions:

- Division staff entered 4,547 training records for all employee classifications.
- Staff attended statewide Training Officer meetings to implement training programs provided by the Governor’s Office of Administration.
- Division staff reviews and revises agency Standard Operating Procedures and develops and reviews certain agency report forms.
- Division staff serves as the agency point of contact with the American Red Cross for training services and materials.
- Division staff serves as liaison with East Stroudsburg University, Northeast Wildlife DNA laboratory for collection of samples for deer, bears, turkeys, etc and for sample collection protocols. This project, when completed, will provide DNA databases for all big game animals in PA and many other species of special interest.
- Division staff serves on the Agency Awards Review Committee and reviewed nominations for various awards.
- The Training Division participated in the orientation of two newly appointed members of the board of commissioners.
- Uniformed staff members of the division continue to participate in field activities such as patrol, attending meetings, answering calls for service and assisting field personnel and working at check stations.

PGC FINANCIAL REPORT

JULY 1, 2007 TO JUNE 30, 2008

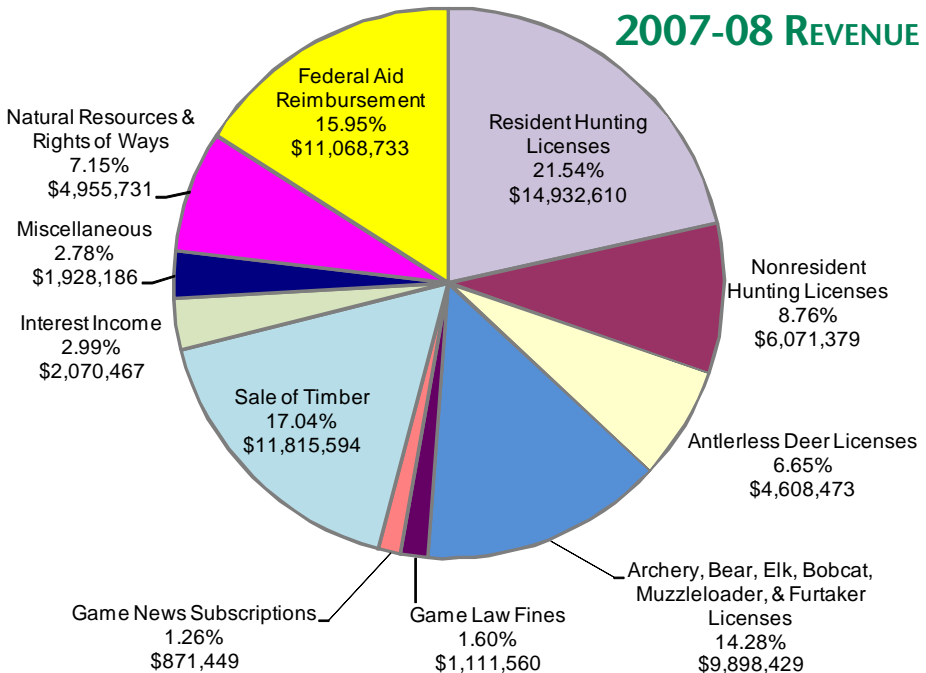
MARY K. DELUTIS
COMPTROLLER

The accompanying Balance Sheet and Statement of Changes in Fund Balance were prepared using the modified accrual basis of accounting, whereby revenue earned and amounts expended or payable at June 30, 2008 are reported. On this basis of accounting, the June 30, 2008 Unreserved/Undesignated Fund Balance in the Game Fund was \$42,147,753, a decrease of \$643,227 from June 30, 2007. Fiscal year 2007-08 expenditures and reserve for encumbrances exceeded income resulting in the decrease in the Game Fund Unreserved/Undesignated Balance.

All other schedules included in this report were prepared on a cash basis combined with an encumbrance budgetary system. Actual revenue collected and credited to the Game Fund during the 2007-08 fiscal year was \$69,332,611, a decrease of \$5,698,578 over the previous year's actual cash receipts. During the year, interest income on securities and Federal Aid decreased by \$1,431,829 and \$879,470 respectively.

Adult resident hunter licenses decreased \$48,009 or 0.37 percent, while non-resident licenses and right of way revenues increased by \$361,417 and \$458,245 respectively. Sales of coal, gravel and hay decreased \$972,461 or 53.94 percent. Sales of timber and wood products decreased \$3,291,154 or 21.79 percent.

Expenditures and commitments for the fiscal year July 1 thru June 30, 2008, as of October 31, 2008, totaled \$68,736,252. Salary and wage costs were \$33,058,300. Employee benefits and training costs were \$15,294,490. The total of salaries, wages and benefits and training costs was \$48,352,790 or 70.3% of total expenditures and commit-





2007-08

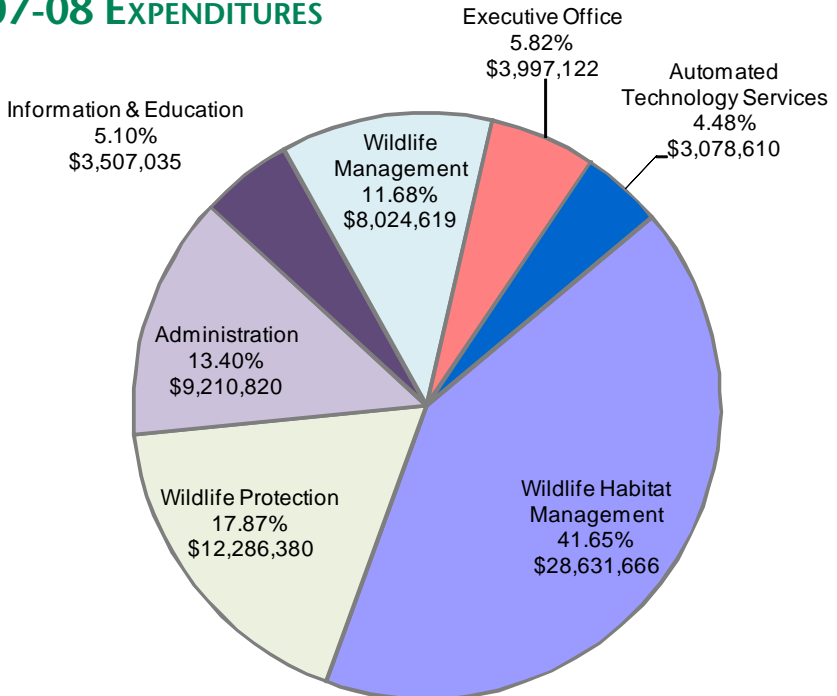
ments. Please note, the report of expenditures for fiscal year 2007-08 was changed to include all current year expenditures through June 30, 2008 and actual expenditures and commitments applicable to fiscal year 2007-08 from July 1, 2008 through October 31, 2008. Previous years' report of expenditures reported a combined total of current year expenditures, encumbrances and balances available for direct charges as of June 30 of the fiscal year. As a result of the change in presentation of the financial information a comparative summary is not provided this

year but will resume June 30, 2009.

Act 138 of 2002 amended the Game Code sections relating to mandatory spending. The Game Code stipulates that a minimum of \$4.25 from each resident and nonresident license and a minimum of \$2 from each antlerless deer license issued for which the full fee has been paid is to be used for habitat improvement, development, maintenance, protection and restoration conducive to increasing natural propagation of game and wildlife on all lands under the control or operations of the Commission, including lands enrolled in the Commission's public access programs and other public lands open to hunting under agreement with the Commission. The money collected for the above are deposited into one separate account.

The number of resident and nonresident licenses sold during the 2007-08 fiscal year, as reported by the Game Commission, totaled 859,691. Antlerless deer licenses sold during the 2007-08 fiscal year, as reported by the Game Commission, totaled 842,345. This mandated that a minimum of \$5,338,377 be expended for the above-mentioned purposes. The actual amount expended from the restricted account as of June 30, 2008 for these purposes was \$6,299,116, an excess of \$960,739 over the requirement.

2007-08 EXPENDITURES



**GAME FUND BALANCE SHEET
JUNE 30, 2008**

ASSETS

Cash	\$419,163
Temporary investments	61,117,905
Accounts receivable	193,972
Due from other funds	83,510
Due from Federal government	2,568,658
Total Assets	<u>\$64,383,208</u>

LIABILITIES AND FUND BALANCE

Liabilities

Accounts payable and accrued liabilities	\$4,020,633
Securities lending obligations	13,100,170
Due to other funds	404,834
Due to political subdivisions	954
Due to other governments	108,333
Due to fiduciary funds	43,442
Total Liabilities	<u>\$17,678,366</u>

Fund balance

Reserved for encumbrances	\$2,756,324
Reserved for restricted revenue	1,800,765
Unreserved:	
Undesignated	42,147,753
Total Fund Balance	<u>\$46,704,842</u>

TOTAL LIABILITIES AND FUND BALANCES

\$64,383,208

**Game Fund Statement of Changes in Fund Balance
for the Fiscal Year Ended June 30, 2008**

REVENUES

Licenses and fees	\$38,274,405
Intergovernmental	12,713,133
Charges for sales and services	17,150,145
Investment income	58,383
Other—Middle Creek donation	315
Operating transfers	497,761
Total Revenue	<u>\$68,694,142</u>

EXPENDITURES

Current

Recreation and cultural enrichment	\$64,992,323
Capital outlay	2,690,736
Total Expenditures	<u>\$67,683,059</u>

NET CHANGE IN FUND BALANCE

\$1,011,083

Fund Balance July 1, 2007

\$45,693,759

Fund Balance June 30, 2008

\$46,704,842



Schedule of Actual Revenue Deposited in Game Fund Fiscal Year Ended June 30, 2008

Licenses and Fees	
Resident hunting—adult	\$13,061,198
Resident hunting—junior	213,588
Resident hunting—senior	375,784
Resident lifetime hunting—senior	169,316
Resident junior combination licenses	415,643
Resident senior lifetime combination licenses	483,055
DMAP harvest permit (residents)	207,989
Nonresident hunting	5,803,391
Nonresident hunting—junior	106,411
Nonresident junior combination licenses	38,013
Resident bear	1,997,279
Nonresident bear	194,062
Antlerless deer	4,037,090
Nonresident antlerless deer license	571,383
Archery	3,926,652
Nonresident archery license	340,072
Muzzleloader hunting	1,942,865
Nonresident muzzleloader license	182,688
Landowner hunting license	5,586
Nonresident 7-day hunting	73,928
Resident furtaker license—adult	533,510
Resident furtaker license—junior	2,051
Resident furtaker license—senior	8,646
Senior lifetime furtaker license	60
Nonresident furtaker—adult	31,067
Nonresident furtaker—junior	178
Issuing agents' application fee	11,774
Special game permits	191,437
Right-of-way	1,714,427
Migratory game bird license	227,254
Nonresident migratory game bird license	25,877
Bobcat permit application	22,185
Elk license application	68,205
Resident elk license	1,390
Nonresident elk license	1,002
Resident military personnel hunting	451
DMAP harvest permit (non-residents)	49,636
Resident special wild turkey	178,796
Nonresident special wild turkey	11,378
Agent fee for fishing licenses	57
Transfer to general habitat improvement	<u>(7,500,000)</u>
Total Licenses and Fees	\$29,725,374
FINES AND PENALTIES	
Game law fines	<u>1,111,560</u>
Total Fines and Penalties	\$1,111,560
MISCELLANEOUS REVENUE	
Interest on securities & deposits	\$2,070,467
Sale of timber & other wood products	11,815,594
Ground rentals & royalties from oil and gas lease	2,376,444

Sale of game news	871,449
Sale of coal, gravel, hay	830,540
Wildlife promotional publications and materials	309,508
Wildlife nongame fund	108,310
Waterfowl management: stamp sales and art print royalties	34,320
Sale of skins and guns	24,400
Other (game land map sales, SPORT promotional publications, Howard nursery seedling sales, prior year expenditure refunds, shipping fees and miscellaneous revenue)	<u>429,344</u>
Total Miscellaneous Revenue	\$18,870,375
TOTAL NONTAX REVENUE	\$49,707,309
RESTRICTED RECEIPTS & REVENUE	
Resident licenses fee—natural propagation of wildlife—general habitat improvement	<u>7,500,000</u>
Total Restricted Receipts & Revenue	\$7,500,000
AUGMENTATIONS	
Federal aid	\$11,068,733
State augmentations (sale of vehicles, PA conservation corps, donations, PENNDOT reimbursement)	<u>1,056,568</u>
Total Augmentations	\$12,125,301
GRAND TOTAL ALL REVENUE IN GAME FUND	<u>\$69,332,611</u>

Expenditures and Commitments

Current Funds For the Fiscal Year Ended June 30, 2008

Salaries and wages	33,058,300
State share employee benefits and training costs	15,294,490
Land purchases and acquisition costs	229,392
Printing and advertising	1,155,958
Automotive repairs, supplies and transportation rentals	2,869,359
Payments to local municipalities in-lieu-of-taxes	1,727,721
Maintenance, rental and improvement of buildings, grounds and machinery	1,226,809
Payments to other state agencies for specialized services	1,423,360
Agriculture and maintenance material supplies	1,702,349
Purchase of motor vehicles	1,387,542
Travel and special conference expenses	558,185
Telephone expenses	632,071
Postage and freight expense	642,739
Heating, electric and water	565,898
Legal and specialized services	1,996,837
Other supplies and services	126,709
Uniforms for Game Commission personnel	107,956
Office equipment, maintenance, rentals and supplies	646,923
Purchase of equipment and machinery	92,709
Electronic data processing contractual services, rentals and purchases	1,884,360
Educational supplies, literature, memberships and classroom equipment	269,006
Insurance—auto, liability, fidelity	155,599
Clinical services, laboratory and medical supplies	44,406
Payments to state owned institutions	73,353
Payments to nonprofit institutions	754,210
Payments to institutions/individuals for research projects	44,658
Purchasing card expenses	<u>65,353</u>
TOTAL COMMITMENTS & EXPENSES	<u>\$68,736,252</u>



2007-08

**Game Fund Expenditures and Commitments by Program Area*
For the Fiscal Year Ended June 30, 2008**

Executive office	\$1,300,883
Assisting other agencies/organizations	60,134
Public Works Program	166,789
Flood related costs	907,771
General administration	14,365,234
Personnel costs	791,848
Warehousing	2,858
Agency purchasing	299,848
Automotive acquisition/maintenance/CC cost	2,782,387
Office maintenance	1,031,972
Training costs	2,162,251
Licensing Program	1,071,426
800 telephone service	12,999
Public education and information services	1,984,471
Publications	1,071,923
Hunter-Trapper Education Program	792,269
Bowhunter Education Program	6,800
Remedial Hunter Education	3,324
Furtaker Education	3,131
Audio-Visual Program	119,626
Conservation Reserve Enhancement Program	985,864
Game farm operations	2,523,448
Wildlife health activities	396,707
Wildlife research support services	962,020
Forest Wildlife Research Program	1,771,780
Furbearer & farmland wildlife research	257,047
Migratory game bird & waterfowl research	382,467
Endangered/Threatened/Nongame Wildlife Management Program	313,185
CARA activities	1,993
State Wildlife Grants	1,494,104
Law enforcement program management & planning	23,904
General law enforcement	6,777,255
Endangered species	23,400
Data center operation	756,919
Computer mainframe applications	226,619
Data communications networking	220,059
Desktop computing	660,514
GIS administration and support	167,029
Land Management administration	6,447,533
Environmental Review Program	342,082
Land acquisition	229,392
Wind Energy Development	131,443
Howard Nursery management	561,898
Herbaceous openings	1,921,968
Public Access Program	1,202,558
Forest management	3,969,865
Food producing improvements	478,668
Game Lands construction and maintenance	6,253,730
Shooting range construction	314,857
TOTAL COMMITMENTS AND EXPENSES	<u>\$68,736,252</u>

*Statement information provided by Game Commission Staff