

Pennsylvania Game Commission

Annual Report, 2010-11

THE Game Commission is proud to present this 2010-11 annual report, highlighting many of the agency's accomplishments over the last fiscal year, July 1, 2010 through June 30, 2011.

Conserve, protect and restore wildlife populations for their many public values.

As the Commonwealth's wildlife management agency, the Pennsylvania Game Commission (PGC) is responsible for managing all of Pennsylvania's 480 species of wild birds and mammals (a complete list can be found on the agency website). Of those, due to funding limitations, primary attention is directed to select game species and our most imperiled species.

During the year, white-tailed deer research activities focused on deer survival and harvest rates in Wildlife Management Units (WMUs) 2D, 2G, 3C and 4B. In these four WMUs, we are investigating the effect of shortening the concurrent antlered and antlerless firearms season from 12 days to 7 days. From June 2010 to May 2011, we recorded 76 mortalities of radio-collared deer. Hunting accounted for 75 percent. Other mortality factors included deer-vehicle collisions, poaching, natural causes and capture-related deaths. An additional 701 deer in these four WMUs were captured and ear-tagged from January to April 2011. Some of these deer also were fitted with radio collars. At the end of the 2011 trapping season, more than 180 radio-collared deer were being monitored on the four study areas.

We continued to work on revising components of the deer management program based on completed research and the Wildlife Management Institute (WMI) evaluation and review. Changes to the Pennsylvania Sex/Age/Kill (PA SAK) model occurred based on research findings from a cooperative study with the Pennsylvania Cooperative Fish and Wildlife Research Unit at Penn State and the WMI report. We also replaced embryos per female with proportion of fawns in the antlerless harvest to assess deer population productivity.

During the 2010-11 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. SAK data were used to estimate the 2010-11 deer harvest. Based on hunter harvest reports and SAK data, hunters harvested 316,240 deer. The antlered harvest was 122,930, an increase of 13 percent from the 2009-10 harvest of 108,330. Antlered deer harvests increased by 20 percent or more in WMUs 2C, 2F, 2G, 3D, 4C, 4D and 5C. Also, hunters harvested 193,310 antlerless deer in 2010-11, a decrease of four percent from the 200,590 taken in 2009-10. The decrease in the antlerless harvest reflects the reduction in the number of antlerless deer licenses allocated for the 2010-11 seasons, as well as the shortened antlerless deer firearm season in eight WMUs.

We completed revisions of the Deer Management Assistance Program (DMAP) applications, including detailed management plan requirements for public land owners and those under the minimum acreage thresholds. DMAP was developed to provide both public and private landowners a tool to better control deer numbers on their properties through hunting. For 2010-11, the Commission approved 870 applications, down from the 920 in

2009. Enrolled acres changed little, from 1,650,783 in 2009 to 1,658,732 in 2010. The number of coupons requested and approved decreased from 33,642 in 2009 to 27,588 in 2010. Hunters redeemed 23,736 DMAP coupons. While all DMAP harvest permit holders are required to submit a report card, only 54 percent reported. DMAP harvest was 4,423 antlerless deer.

CWD samples (3,890) and two bovine tuberculosis-suspect lymph nodes were taken from hunter-killed deer as part of annual surveillance activities. Assistance was received from the Pennsylvania Department of Agriculture (PDA) and USDA at all region sampling locations. A total of 3,882 samples were found to be testable, and all were negative for CWD.

More than 100 elk were radio-tracked throughout the year to evaluate survival, distribution and movements across the range in northcentral PA. PGC researchers captured and radio-instrumented additional elk between January and March 2011 to improve the distribution of marked animals across elk subpopulations and to replace faulty transmitters.

An annual population survey was conducted in the winter of 2011 to determine a minimum count of the elk population. Elk marked with radio collars were used to complete a Minimum Number Alive (MNA) count and to monitor elk movements, reproduction, survival and habitat use. There were 752 elk recorded during the MNA count, which included 418 adult cows, 153 calves, 128 branched bulls and 53 spikes. In our continuing efforts to assess elk recruitment, 20 newborn calves were captured in the spring of 2010.

Elk hunting seasons were held from September to November 2010 with 51 elk licenses (18 antlered, 33 antlerless) issued. All elk harvested were examined, a tooth and select tissues were collected and a report was completed. Samples were collected from hunter-killed elk to allow surveillance for brucellosis, tuberculosis and CWD. No evidence of these diseases was detected. Of the 51 hunters who participated, 41 elk were harvested (18 antlered and 23 antlerless).

Bear populations were monitored using a statewide capture and tagging program, mandatory check stations during the hunting season, aging of teeth collected from roadkilled, captured and harvested bears, assessment of reproduction during visits to dens of hibernating bears fitted with radio-collars, and a statewide wildlife food survey.

In all, 749 bears from 52 counties were captured and ear-tagged during 2010 in advance of the fall hunting seasons. Based on the ratio of tagged-to-untagged bears observed in the harvest, the 2010 statewide bear population was estimated at 18,300, nearly identical to the 2009 estimate.

In the fall of 2010, we surveyed by mail 7,000 licensed resident bear hunters to measure opinions about different aspects of bear management and to determine participation levels in the current bear seasons, and 2,687 surveys were ultimately returned. Seventy-one percent of respondents were satisfied with current management of bears, 19 percent were neutral and 11 percent were dissatisfied. Seventy-six percent of hunters who purchase a bear license hunt for bears almost every year.

Several changes to the bear hunting season were implemented in 2010: the archery season was opened statewide and lengthened by three days; opening day of the general season was moved to Saturday; and the extended season was closed. A record 161,119 bear hunting licenses were sold during 2010 that resulted in 3,090 bears harvested; 269 during the archery season; and 2,821 in the statewide 3-day season. The 2010 harvest ranked fifth among annual bear harvests.

The average age of a harvested bear was 2.2 years for males and 3.4 years for females.

Data were available to estimate bear abundance in 11 WMUs; WMUs 2C, 2F, 2G, 3A, 3C, 3D, 4A, and 4B have slightly increasing trends in their bear populations, whereas 2D, 2E, 4C, 4D and 4E have primarily stable bear populations.

Cub production and survival was monitored by visiting the dens of 54 radio-collared bears during February and March. In all, 53 adults, 77 cubs and 21 yearlings were tagged in 11 counties. Average number of cubs per litter was 3.1, and included 2 litters with 1 cub each, 2 with 2-cub litters, 13 with 3-cub litters, and 8 with 4-cub litters. Sex ratio of cubs was 62 percent males.

There were 1,140 entries in the statewide human-bear conflict database during 2010. Conservation officers relocated 310 bears, and there were 34 bear damage claims totaling \$9,932 approved for payment. Twenty-seven bears were euthanized because of crop damage or repeated nuisance behavior.

A study investigating the movements, home range and habitat use of bears living in suburban environments was initiated in the spring of 2010. Radio collaring of bears in and around Scranton/Wilkes-Barre, State College and Johnstown resumed in April 2011 as part of the ongoing Urban Bear Study. Twenty one bears were collared this year, and 35 are now fitted with collars as the fiscal year concluded. Twenty seven additional bears had also been collared, mostly last summer, but have since died or slipped off their collar. Trapping is anticipated to continue until all 50 collars are deployed.

Fall turkey hunting season length continues to be our primary means of managing turkey populations; season lengths vary from a closed season to three weeks, depending on WMU. The Board of Commissioners approved significant changes to fall 2010 turkey hunting seasons. Fall seasons in WMUs 5C and 5D (previously four days in length) were closed to reverse current downward population trends. In WMU 5A, after seven years of a closed fall season, the Board approved a conservative 3-day (Tuesday-Thursday) hunt, because the population has stabilized at a level sufficient to support harvest. To separate part of the turkey and archery deer seasons, and avoid a conflict with a change in the bear season, the Board approved fall seasons in most other WMUs that opened later than in previous years and ended the Friday before Thanksgiving (the day prior to the new opening day of bear season). However, due to this reduction in season length and in an effort to reverse the trend of declining fall turkey hunting participation, the Board also approved an additional 3-day season on Thanksgiving Day and the two days following for all WMUs except 5A, 5B, 5C and 5D.

The fall 2010 harvest was 15,884, 24 percent lower than the 2009 harvest, and 33 percent below the previous 3-year average. Harvest density (0.31 turkeys harvested per square mile) was 42 percent below the previous 3-year average (0.53 turkeys/mi²), the lowest level since prior to 1995, and the seventh consecutive year with an average below 0.60 turkeys/mi². Even though the number of fall turkey hunters increased slightly (4 percent) from 2009 (163,433 and 156,752, respectively), days hunted (457,435) decreased 14 percent from 2009 (529,427). Hunter success in 2010 (10 percent) was 27 percent below 2009 (13 percent), and 35 percent below the previous 3-year average of 15 percent. Shorter seasons, below average recruitment and substantial mast crops (which tend to disperse flocks and make them more difficult to locate) accounted for the decreased harvest and hunter success.

A turkey hunter survey was mailed to 10,000 hunters (4,470 usable returns received) after the fall 2010 season to determine hunter attitudes, satisfaction and daily participation

with the new season structure. Results indicated that, at least with this initial survey year, we did not substantially recruit new turkey hunters nor reactivate former fall turkey hunters. Satisfaction with and participation in the new season segment during the Thanksgiving holiday were both relatively high, but the net decrease in season length decreased overall participation. The majority of participants were satisfied with their 2010 fall turkey hunting experience. Similar to trends observed nationally, available time, higher turkey populations and places to hunt are more important factors influencing fall turkey hunting participation than season structure.

The Board approved extending the spring turkey season to May 31, to provide additional hunting recreation without impacting the resource, because with most hens in the later stages of nest incubation, disturbance of hens in late May is minimal. In 2010 this extra day accounted for four percent of the total statewide harvest. The half-day youth hunt on the Saturday prior to the regular season accounted for eight percent of the total statewide harvest, demonstrating the importance of this youth opportunity.

The final 2010 spring harvest of 33,849 (31,908 plus 1,941 second birds by hunters who purchase an additional license) was 24 percent below the 2009 harvest of 44,639 (42,478 initial plus 2,161 second), and 18 percent below the previous 3-year average (41,149). The below average recruitment in 2009 may have accounted for the decreased harvest. Juvenile males (jakes) comprised only 10 percent of the spring 2010 harvest, half the average and the lowest level recorded.

Similar to fall, the number of spring turkey hunters, 237,037, also increased from 228,903 in 2009, and was six percent higher than the previous 3-year average of 223,074. Hunter success, however, was lower (14 percent) than the previous 3-year average (18 percent). Highest hunter success was in 2001 at 21 percent.

Results of the tri-state (New York, Ohio, Pennsylvania) gobbler harvest rate study, 2006-09, were accepted for publication into the *Journal of Wildlife Management*. We used leg band recovery models to estimate survival rates, and assess how harvest rates may be related to management strategies and landscape characteristics. We banded 3,266 male wild turkeys throughout the three states.

The second year of a hen harvest and survival rate study is underway. Knowledge of fall harvest rates and annual survival rates will help us develop a more systematic and transparent process for determining fall turkey hunting season recommendations, which will allow for more explicit incorporation of uncertainty (spring weather, reproduction) into decision making and help us address the competing objectives of optimizing hunting recreation and turkey abundance. During fall 2010 and winter 2011, 425 female and 137 male turkeys were leg-banded, including 88 hens also marked with satellite transmitters. Total marked turkeys to date are 725 females (119 of these also received satellite transmitters) and 186 males. As of early June 2011, we were monitoring 33 hens with transmitters. The highest mortality rates have occurred during the nesting season (primarily from predation).

Game Take Survey estimates indicated that 91,003 hunters harvested 66,385 grouse during the 2010-11 season. The estimated number of hunters and the estimated harvest both decreased by 13 percent from 2009-10. Number of days afield per hunter decreased 21 percent, but harvest per hunter day increased 5 percent.

The annual Grouse and Woodcock Cooperator Survey tracks hunter effort and flush rates for these species and serves as a long-term index to the quality of grouse and woodcock hunting and the status of “hunnable” populations (i.e. those in good habitat) across the state. The grouse cooperator survey indicated that cooperators averaged 26 hours hunted, 33 grouse flushed, and 2.0 grouse bagged during the 2010-11 seasons. The statewide flushing rate of 1.30 flushes per hour was below both the 2009-10 rate (1.40) and the long-term (1965-2009) average 1.41. Compared with the previous year, both the Northwest and Southeast regions had increased flushing rates, while the flush rate in the Northcentral Region decreased slightly. Flush rate in the Northeast Region decreased 25 percent, while the Southwest and Southcentral rates declined by 7 and 17 percent, respectively.

USFWS federal Harvest Information Program estimates indicate that Pennsylvania continues to have the most woodcock hunters (9,000) of the 17 states in the Eastern Management Region. Woodcock harvest was 12,800, up 27 percent from 2009. Participants in Pennsylvania’s woodcock cooperator survey recorded a statewide flushing rate of 1.0 flush per hour, similar to the 2009 rate of 1.01 and well below the long-term average 1.45.

The 2011 woodcock Singing Ground Survey was conducted in cooperation with the USFWS between mid-April and early May. There was a small decrease (statistically non-significant) from 2010 in the number of singing males per route in Pennsylvania, while numbers for the Eastern Region remained the same as in 2010. Short-term (10-year) trends in woodcock populations are stable, but over the long term (1968-2011), populations have declined significantly due to decreased amounts of young forest habitat. Populations of ruffed grouse and other species that rely on this habitat type have also declined as a result of the loss of young forest habitat.

The PGC hosted the 2011 Woodcock Wingbee at Bald Eagle State Park in March. Participants, representing 11 state and federal agencies, classified 13,569 wings by age and sex to determine reproductive success during the 2010 breeding season. Preliminary results indicated an overall age ratio of 1.4 juveniles per adult female, which was higher than in 2009 but slightly below the long-term average. Attendees also toured and discussed the park’s woodcock and golden-winged warbler habitat management sites.

The USFWS HIP estimated that 19,900 mourning dove hunters in Pennsylvania took 226,500 doves during the 2010-11 season. This was a 10 percent increase in the number of hunters and a 20 percent increase in doves bagged compared to 2009-10.

The Ring-necked Pheasant Management Plan for Pennsylvania 2008-2017, approved by the PGC in 2009, is being used to guide pheasant recovery efforts in the state. The Plan has a goal of establishing at least four Wild Pheasant Recovery Areas (WPRAs) with at least 10 hens/mi² in the spring through habitat improvement and the release and temporary protection of wild trapped and transferred ring-necked pheasants.

In FY 2010, we assisted Pheasants Forever and Habitat Forever with completion of an application for a fifth WPRA in Franklin County, which was given final approval by the Board of Commissioners at its April 2011 meeting. For all WPRAs, regulations are in place prohibiting the release of pen-raised pheasants, dog training from early February through July 31, and the hunting of pheasants.

In the Pike Run WPRA, 591 wild ring-necked pheasants from South Dakota were released in 2005, 2006, 2007 and 2008. Densities in the Pike Run WPRA were 1 hen/mi² in the core

area and 1 hen/mi² overall this year. The 6-year release and monitoring effort on this WPRA is now complete.

In the Central Susquehanna WPRA, 993 pheasants trapped in South Dakota and Montana were released during the 3-year population establishment phase. In 2011, spring hen densities were 12 hens/mi² in the core part of the Turbotville-PPL study area portion of the WPRA, and 6 hens/mi² in the Turbotville-PPL study area overall. In both the core area and overall study area of the Greenwood Valley portion of the Central Susquehanna WPRA, spring hen densities were 3 hens/mi². Population monitoring on this WPRA will conclude in 2012, the third year post trap and transfer. No additional wild pheasants will be released on this area.

In the Somerset WPRA, winter 2011 marked the third and final year of wild pheasant releases. There were 297 birds (273 females and 24 males) released in 2011, following 318 pheasants (282 females, 36 males) in 2010 and 346 (277 females, 69 males) in 2009. We radiomarked 50 of the incoming females for survival monitoring, and were tracking 27 of these birds as the fiscal year ended. Spring 2011 hen densities in the Somerset WPRA were 2 hens/mi². Pheasants will be monitored from 2012 through 2014, now that trap and transfer is completed.

The initial wild pheasant releases in the Hegins-Gratz Valley WPRA occurred in winter 2011, with 298 birds (274 females and 24 males) from South Dakota. We radiomarked 65 of the incoming females and were still tracking 37 as the fiscal year closed. The first year for estimating hen densities on this WPRA will be in the spring of 2012. Two more years of releases (300 birds/year) are planned, and monitoring will continue during the remainder of the transfer/release period (2012-13) and for an additional three years after trap and transfer is completed (2014-2016).

Study areas and habitat types have been delineated in the Franklin County WPRA. We also conducted crowing counts on several routes within the WPRA to obtain baseline data on the existing pheasant population prior to initiation of trap and transfer. The first releases of wild-trapped pheasants (obtained from Midwestern states) on this new WPRA are anticipated in winter 2012, with a goal of releasing 300 each year for three years. Pheasants will be monitored during the transfer/release period, and for an additional three years after trap and transfer is completed (2012 through 2017).

The PGC's four game farms continue to operate with a reduced production quota of 100,000 ring-necked pheasants. Propagated birds remain popular with sportsmen and provide many hours of hunting recreation.

Commission staff released 112,350 pheasants for hunting in 2010-11, of which 15,220 were released at designated sites throughout the commonwealth in early October for the youth pheasant hunt. The Game Take survey indicated that 5,048 resident junior hunters harvested 4,617 pheasants during the 2010 youth hunt. During all pheasant seasons, 71,579 hunters harvested 103,366 pheasants.

Populations of northern bobwhite quail have declined by 75 percent to nearly 100 percent over the last 40 years across most of their historic range, including a 97 percent decline in Pennsylvania. Achieving the Northern Bobwhite Quail Management Plan's goal of maintaining and restoring wild breeding populations of northern bobwhite quail in suitable

habitats in Pennsylvania will likely require significant investments in research, monitoring and farmland habitat improvements. No quail restoration projects were active in 2010-11.

Estimates of active duck and goose hunters in Pennsylvania from the federal HIP were 23,200 and 28,100, respectively. The HIP estimate of total duck harvest for 2010-11 was 114,200, about 30 percent below the long term average. The top five duck species harvested were mallard (50,700), wood duck (31,800), black duck (7,400), green-winged teal (5,100) and common merganser (4,100).

The HIP harvest estimate for Canada goose harvest in Pennsylvania for 2010-11 was 155,700, 16 percent below average. Pennsylvania ranked second among Atlantic Flyway states for total Canada goose harvest.

Overall snow goose harvest (regular and conservation seasons combined) was 7,400, 42 percent below the combined regular and conservation seasons average harvest for the previous two years. The reduced harvest was due to extensive snow cover during the regular season period, and relatively low numbers of juvenile snow geese in the fall/winter population due to poor gosling recruitment on the Arctic breeding areas in 2010.

Representative samples of waterfowl are banded annually in Pennsylvania as part of the cooperative Atlantic Flyway banding program. Banding data is essential for determining the timing and distribution of the waterfowl harvest, overall harvest and survival rates, and migration patterns; and allows for evaluation of the effects of changes in hunting regulations. Fiscal year banding efforts included preseason duck banding, winter black duck banding and resident Canada goose banding.

Two staff members participated in the annual USFWS Atlantic Flyway Waterfowl Wingbee in Laurel, Maryland. At the Wingbee, federal and state personnel examine some 20,000 duck wings and goose tails to determine the composition of the previous hunting season's harvest in terms of species, age, sex, geographical location and temporal distribution. This data is used for a variety of waterfowl management applications. We also gained additional training on new techniques and criteria for determination of waterfowl species, age and sex.

PGC staff continued efforts to monitor geographic distribution and numeric changes in important furbearer populations, with the most intensive work focused on fisher, bobcat, and river otter. We continue to use independent methods to track these populations, including reports of vehicle-caused mortalities, incidental captures and various measures of reported sightings.

The Game Take Survey, Furtaker Survey and WCO furbearer questionnaire continue to be important instruments to monitor furbearer populations across the commonwealth.

Fisher populations continue to expand here. We estimated that 933 fishers were captured and released by Pennsylvania trappers during 2009-10 seasons. The annual number of fisher observations and incidental captures reported to WCOs has also been increasing since fishers were reintroduced in 1996. Fisher populations are rapidly expanding from the reintroduction areas in northern regions and naturally expanding into regions of southwestern and southcentral Pennsylvania. Eighty-five percent of WCOs surveyed during 2010-11 reported fisher populations existing within their districts. A conservative 6-day fisher harvest season was approved for 4 WMUs during December 2010.

We monitored Pennsylvania's first regulated fisher harvest season and compiled harvest reports. One hundred and thirty-six reports were received initially by online and phone

reporting. A survey designed to assess participation and trapping effort was sent to all permit holders who did not report a fisher harvest. We estimate that 152 fishers were harvested during the established season. We coordinated with staff at Indiana University of Pennsylvania to collect fisher carcasses and genetic samples from the 2010 season.

River otter populations are expanding. Numbers of incidental otter captures, primarily by beaver trappers, have increased during recent years, with more than 25 incidental captures reported annually since 1996. The majority occur in the Northeast Region, but recent reports indicate continued population expansion throughout the Susquehanna River drainage. In 2010, otters occupied 91 percent of WCO districts. The PGC requested Convention on International Trade in Endangered Species (CITES) export status for river otters during 2010.

We monitored Pennsylvania's first 3-week open bobcat hunting and trapping seasons and compiled harvest reports. There were 1,133 reports received via online and phone reporting. The majority of reports (64 percent) were received by trappers using the online system. We provided CITES tags to those who requested them. We estimate that 1,136 bobcats were harvested during the established season.

We collected age and gender data from 8,924 Pennsylvania muskrat pelts to help identify whether reproduction and/or recruitment have changed over the past 20-30 years, and whether these factors have contributed to the widespread muskrat decline. Muskrat reproduction and recruitment appear normal or slightly higher than levels recorded in the past. The muskrat population was composed of about 11 percent adults and 89 percent juveniles. Mortality factors other than reproduction and recruitment are evidently affecting muskrat populations. This information will help direct our future research efforts in identifying the causes of the muskrat decline in Pennsylvania.

We prepared the final draft of the statewide beaver management plan and incorporated revisions and recommendations stemming from public comments. The beaver management plan is now complete and has been posted on the agency's webpage. The plan provides a summary of beaver biology, habitat, past and present population management, damage management, recreational and economic values, and recommendations and research needs.

Pennsylvania passed a major conservation milestone in 2011, when more than 200 bald eagle nests were known to be in the commonwealth. The number of nesting bald eagle pairs reached 212. Fifty of the state's 67 counties hosted eagle nests, with the largest numbers in Crawford (19), Pike (19) and Lancaster (18).

In 1986, there was one peregrine falcon nest in Pennsylvania, and it was the first nest in 30 years. In 2011 there were 31 active peregrine nests and 23 were successful, with 52 nestlings banded at 17 sites.

Only one osprey nest was known in Pennsylvania in 1986. During 2010, volunteers and cooperators reported 115 osprey nests, located in 21 counties.

Great egrets, black-crowned night-herons and yellow-crowned night-herons are colonial-nesting waterbirds protected as endangered species in Pennsylvania. Yellow-crowned night-herons actually nest in a Harrisburg residential neighborhood, while the rookery on Wade Island, in the Susquehanna River, harbors both great egrets and black-crowned night-herons, along with a growing population of double-crested cormorants. Four other black-crowned colonies are known, all in southeastern counties.

White Nose Syndrome (WNS) is a disease associated with a fungus that grows on the exposed skin (face, wings and tail) of bats as they hibernate in mines and caves. It causes them to awaken during hibernation, exhaust their fat reserves and emerge in search of insects during winter when that food source is not available. The result is high death rates among our primary predators of night-flying insects, including agricultural and forest pests, potentially destabilizing ecosystems and increasing reliance on chemical alternatives.

An epidemic of unprecedented proportion in North American wildlife, the rapid spread and extreme virulence of WNS threatens the continued existence of even the most common species of cave-dwelling bats. In five years since its discovery in upstate New York in February 2006, WNS had been confirmed in 16 states and four Canadian provinces, and two additional states had suspected sites by the end of the 2010-11 hibernation season. In Pennsylvania, WNS had been confirmed in 15 counties. Visual evidence of WNS was found at hibernacula in 7 additional counties, but specimens could not be obtained for laboratory confirmation.

Immediately upon the arrival of WNS in Pennsylvania, the Commission established collaborative partnerships with top researchers, implemented multiple research projects, and began to assist state and federal agencies in strategic decision making and planning.

We hosted two annual meetings with national attendance and have written successful grant proposals for federal funding for both a multi-state response to WNS and in-state capacity building.

The northern flying squirrel is a state endangered species. The management plan for a Luzerne County State Game Lands that harbors an active northern flying squirrel population will now permanently protect core habitat and improve surrounding habitat through timber management. Approximately 1,500 native red spruces were planted on the Game Land, and once established they should improve food availability for flying squirrels.

Talus on the ridges of southcentral Pennsylvania provided the most encouraging results during surveys for the reclusive and largely solitary Allegheny woodrat, a state threatened species. In fall 2010, live trapping on a state forest in Huntingdon County resulted in the capture of two adult females, one adult male and four juveniles of various ages. Also in Huntingdon County, a new active woodrat site was found in a state park and recent sign was found on a State Game Lands.

The primary responsibility of the PGC six regional wildlife diversity biologists is the habitat-based Private Landowner Assistance Program (PLAP). During 2010-11 fiscal year, regional diversity biologists prepared 119 plans for 12,759 acres. Since program inception in 2004, more than 930 plans have been produced for more than 140,680 privately owned acres. Regional diversity biologists also contribute to comprehensive planning for the state's more than 1.4 million acres of game lands.

We provided numerous wildlife related presentations to the public during the year, and routinely updated the agency website to expand the availability of wildlife information.

Manage and protect a network of public and private lands and waters to provide habitat for wildlife.

Providing hunting and furtaking opportunity are among State Game Lands mandates. During the year, 4,279 miles of roads were maintained for hunter and habitat management

access; 10,560 parking lots were maintained; 78 bridges repaired; 83 culverts replaced; and 313 miles of trails maintained.

During the year, 2,012 acres were added to the State Game Lands system, bringing to 1,450,754 the total of State Game Lands acres owned. These are comprised of 305 tracts, with at least one tract in all but two counties.

Last year, to help users better understand our habitat management work, 5,000 signs were posted on various State Game Lands highlighting food plots, prescribed fire treatments, deer fence enclosures and other management practices evident on the particular Game Lands.

Five demonstration areas were identified or established on State Game Lands for the Appalachian Mountains Woodcock Initiative. These areas are providing examples of best management practices for American woodcock, a species of greatest conservation need in our Wildlife Action Plan.

In lieu of taxes, the agency provided from the Game Fund \$1.20 per acre for payment in-lieu-of taxes. These totaled \$1,737,258 and were divided into equal payments for the county, school district and township where Game Lands are located.

The Howard Nursery produced and distributed 2,060,525 tree and shrub seedlings for wildlife food and cover plantings, and 484,450 of the seedlings distributed were sold for \$105,095.52. For the Seedling for Schools program, 163,950 seedlings, in 1,010 orders to 783 schools were provided, along with teacher resource packets and student activity pages. The nursery wood shop produced 22,136 wood products which included: 4,417 bluebird boxes; 10,282 bluebird box kits; 373 wood duck boxes and kits; 97 bat houses; 137 custom signs; 84 boundary line signs; and 139 bulletin boards and 3,575 sign backboards for use on Game Lands and cooperative access properties. Wood products are available for purchase on the agency's website.

During the year, the wildlife habitat component of the white-tailed deer management program was refined. Seedling and sapling growth and deer browse influences were evaluated, as well as effects from soils, invasive species, natural light densities, random forest inventory survey plots.

As part of a concerted effort to manage invasive plant species on Game Lands, 1,678 acres were treated through the agency's right-of ways program. This treatment was made part of the maintenance conditions within each license agreement, and will continue to be accomplished as part of the licensee obligations.

Among the agency's many ROW agreements, of particular interest were the agreements with certain radio stations that allowed the stations to exchange or reduce delinquent ROW license fees for free radio time. This provided the Game Commission to reach thousands of radio listeners with messages about our nesting box and seedling product sales and hunter/trapper programs. Over the course of the year, 1,204 1-minute radio ads aired, worth \$40,423.

Since the creation of the Game Commission's Wind Energy Voluntary Cooperative Agreement, 30 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.

This past year, in our effort to develop long term management plans for each State Game Lands, 36 separate plans were completed, bringing to 117, covering 504,000 acres, the number completed to date. These plans, which include infrastructure records, habitat cover, forest types, access roads and parking lots, will help ensure sound, sustainable, and efficient habitat management over the years.

The Forest Inventory and Analysis Program, established in 2005, is now in its first season of re-measuring plots established in the prescribed 5-year cycle. To date, 875 permanent assessment plots have been established. These plots are being re-assessed on 5-year cycles to determine changes in growth, health, and species composition of State Game Lands forest habitats and will provide valuable habitat planning information. The FIA Section has

also developed a sampling system for monitoring habitat conditions before and after the use of prescribed fire. Initial data gathering and analysis has been done on SGL 176, in Centre County, for the 2010 prescribed fire season and pre-burn and post-burn data has been gathered for the 2011 prescribed fire season.

A total of 495 Pennsylvania Natural Diversity Inventory (PNDI) reviews were completed for oil and gas projects throughout the state, 252 of which were related to Marcellus shale development. The reviews involved over 795 oil/gas wells (109 Marcellus wells), over 1,645 miles of oil/gas pipeline (1,241 for Marcellus), and 13 seismic surveys totaling over 2,641 square miles of survey area. Measures were recommended or required for 111 reviews to avoid or minimize adverse impacts to wildlife

Species surveys were completed at an active northern goshawk nest site, an active great blue heron rookery, two active Allegheny woodrat habitat sites, and a silver-haired bat roost site. Habitat surveys for Allegheny woodrats and/or eastern small-footed myotis were completed at three additional sites. Winter helicopter surveys were also completed in the lower Pine Creek valley to assess the potential for Allegheny woodrat and small-footed myotis habitat delineation for the avoidance and minimization of adverse impacts to these habitats during seismic surveys.

A total of 638 PNDI reviews were completed for construction and development projects throughout the state. These reviews indentified 158 potential impacts to species of special concern that were reviewed and commented on.

A total of 97 environmental reviews were completed for various proposed mining or abandoned mine reclamation projects with a total acreage reviewed of over 22,105 acres. The purpose of these reviews is to provide preliminary comments to mine operators and DEP to avoid and minimize impacts to wildlife and wildlife habitat associated with mining operations being planned.

The Oil/Gas and Mineral Development Section reviewed 91 oil or gas well locations and their affiliated access ways on State Game Lands. Of these, 59 were Marcellus Shale oil and gas well locations and 14 were under PGC oil/gas development leases and 45 on State Game Land surface where the PGC does not own the subsurface gas rights. These reviews and coordination resulted in improvements to parking lots and roads as well as maintenance on related Game Land culverts, bridges and gates, and enhanced erosion and sedimentation control structures, at the expense of the developer.

Logging contractors completed 39 contracts during the year, improved 48.9 miles of haul roads, constructed 10.6 miles of new roads (which became wildlife food strips after seeding), and placed 111 culverts. The value of these on-site improvements exceeded \$545,000, with cost borne by the timber operator and, thus, deducted from the totals of the timber bids. Additionally, \$611,000 worth of improvements were completed through timber sale contracts, including landing and skid road seeding with wildlife mixes, parking lot construction, gate installation, and deer exclosure fencing.

With early successional habitats in decline across the state, causing them to be listed as "key habitats" in the Wildlife Action Plan, 1,814 acres of forest and shrubland were treated by Food & Cover crews, and 3,083 acres were treated through contracts to provide more of this habitat. Many of these acres will be maintained through prescribed fire.

Grasslands are another key habitat, and many of the state's largest grasslands occur on strip mined sites. The Game Commission embarked on a grassland conservation initiative late in the year. Thus far, 1,196 acres of strip mines were reclaimed to native herbaceous habitat.

Maintaining optimum habitat diversity on game lands is an important goal of our Forest Habitat Management Program. Forty-five (45) forest habitat management projects containing 6,550 acres were offered for bid to commercial timber harvest operators during the year. These contained approximately 17.8 million board feet for which bidders offered \$4,432,849. Although this represents an increase in total acres from the previous year, the average bid values decreased, evidence of depressed timber markets in the economy.

Timber contractors harvested 5,690 acres that yielded more than 18.7 million board feet of logs and 152,207 tons of pulpwood. These operations generated \$7,636,251. This was an increase of 704 acres over the previous fiscal year. However, these additional acres yielded \$1.5 million less in revenue.

Additional non-commercial forest habitat improvement projects including regeneration treatments, crop tree releases, and pre-commercial thinnings resulted in 1,731 additional acres of improved habitat. Also, the forestry staff provided support to the ever-growing mineral recovery and right-of-way operations on 330 acres of State Game Lands, which demonstrates a continued increase in OGM and ROW operations.

With the stabilization of more balanced deer populations, positive impacts are being noted in forest habitats. The PGC is actively removing deer exclosure fencing in areas where habitats have successfully regenerated. In the 2010 Fiscal Year 1,143 acres of fencing were removed, while only 979 acres of fence were constructed.

The agency's Public Access programs continue to provide hunting opportunity on private lands. This year, 14,508 Public Access cooperators allowed hunting access to 2,707,323 acres of private land.

Considerable wildlife habitat was improved on private lands via Farm Bill Programs. This included 216 CREP plans which added 2,435 acres to the program, brings the PA CREP and CRP total since 2000 to 206,921 acres, making Pennsylvania a leader in the program. An additional 142 landowners offered to enroll 4,395 acres in conservation cover through the Wildlife Habitat Incentives Program (WHIP) and Environmental Quality Incentives Program (EQIP – Forestry).

Promote and perpetuate our hunting and trapping heritage.

The Hunter-Trapper Education Division was responsible for producing and distributing the following printed training guides and materials that promote hunting and trapping:

"Today's Hunter and Trapper in Pennsylvania" student guide – 38,680 copies

"IHEA Hunter's Handbook" – 38,700 copies

"IHEA Hunter and Shooting Sports Education Journal" – 10,800 copies

"Today's Bowhunter" student guide - 1000

"Today's Crossbow" student guide - 20

"NBEF's 3-in-1 Responsible Hunting Guide" – 470

"Successful Furtaking" student guide – 270

Cable restraint student manuals - 295

These materials are distributed as part of the various hunter education programs and instructor training workshops, with numbers paralleling trends in class enrollments.

A total of 908 basic Hunter-Trapper Education courses were conducted statewide during this reporting period. The total is comprised of 759 traditional multi-day courses, and 149 2-hour independent study classes. This compares to the total of 827 statewide courses during FY2009-10; 724 traditional and 103 independent study classes, and marks a nearly 10 percent increase in the number of courses.

During the calendar year 2010, a total of 35 hunting-related shooting incidents occurred, at a rate of 3.79 incidents per 100,000 license buyers. This marks a 2.9 percent increase over the previous year. The previous calendar year's 34 incidents was one of lowest on record. The total number of incidents recorded during 2010 remains below the current 10-year average of 51.1 incidents per year with a rate of 5.15 incidents per 100,000 license buyers.

A mandate to conduct a minimum of 60 more HTE classes during the months of October and November 2011 was issued by the agency's Executive Director during this reporting

year. It is anticipated this addition will have a profound effect on the number of students enrolled and certified during the next reporting period.

The National Archery in the Schools Program (NASP®) was administered throughout the state by a volunteer under the direct guidance of NASP® since approximately 2005. It is preferred by NASP® to have the program coordinated at the state level by state wildlife agencies, and to fulfill this goal the PGC assumed “jurisdictional” ownership of the National Archery in the Schools Program in the summer of 2010. This coordination includes recruiting, training and certifying new physical education teachers in various school districts statewide, as well as other individual volunteers, to then conduct NASP® activities in their respective school districts while following established program guidelines.

Additionally, \$100,000 has been set aside to assist new schools in purchasing NASP® equipment kits to help get those schools started in the program. Each new school will be granted \$1,500 toward the purchase of a NASP® kit, which runs nearly \$3,100. The balance will then be funded by individual school districts, other grants, or from donations from local sportsmen’s organizations and businesses.

On April 9, 2010, the Pennsylvania state NASP® tournament was held under the coordination of the Pennsylvania NASP coordinator. It is unknown how many schools participated, but approximately 300 students participated. The PGC hosted the 2011 PA State NASP® Tournament on March 11, 2011, at the Pennsylvania State University Multi-Sport Facility. Seventeen schools and more than 400 students were registered for the event. However due to weather conditions that closed many schools for the day across the state, only 16 schools and slightly more than 300 students were able to participate.

Participation in the statewide tournament, along with certain qualifications, allowed students to participate in the 2011 National NASP® Tournament; three PA schools with 52 students participated in the National Tournament. Participation at the national level allows students to register for the World NASP® Tournament held in October of each year.

A cooperative agreement with the National Wild Turkey Federation was maintained to fund costs of conducting its Women in the Outdoors (WITO) events. Nine WITO events were held across the state, with 746 participants. To help women interested in participating in a WITO event near them, the agency launched a new Internet-based Event Manager program to find and register for these events. Using Event Manager is crucial, as it will allow for the WITO program to be evaluated as a hunter/trapper recruitment tool.

Toward the end of FY 2010, work began in redesigning the Youth Field Day format into a Family Field Day concept. Additionally, to help individuals interested in participating in a Youth Field Day/Family Field Day find a event, the Event Manager program can also be used.

Significant progress was made in outlining the plan for how Family Field Day participants will be taken from Stage II (Trial Stage of the Hunting/Shooting Participation Classification System) to Stage IV (Continuation with Support). Strategies include a manual to be used by sportsmen’s clubs and organizations that plan on hosting such an event. The manual will include the history of youth field days, current declining license trends, and what needs to change for Field Days to accomplish the goal of being a recruitment/retention tool for hunters and trappers. Also included will be planning documents and step-by-step directions on how to conduct hands-on outdoor-related stations, such as fishing, archery, canoeing, shotgunning, rifle and a wide variety of other activities. The utilization of video media is also planned in several capacities, as is the use of social media and marketing strategies. Of utmost importance is the built-in follow-up events to create continuing social support that is imperative to keeping new hunting/trapping participants actively involved, while improving their skills and establishing a hunting/trapping social support network.

Improve the public's appreciation of wildlife, and their awareness and understanding of wildlife resource management.

In July 2010, a Human Dimensions (HD) Specialist started in the Bureau of Information and Education. This individual is responsible for supervising the Outreach and Education Specialists, in addition to conducting relevant and timely studies, surveys and focus groups.

Two mail surveys were conducted and overseen by the HD Specialist: A survey of hunters to see how they obtain information about the PGC, and a survey of lapsed hunters in Pennsylvania. Additionally, the HD Specialist was responsible for a postcard mailing sent to hunters who had bought during the June to October 2009 time period, but had not yet purchased for the same time period in 2010.

Through the use of a point-of-sale license system, of which FY 2009 was the first full year of using this system, a database of hunters and trappers is continually being developed. This database can then serve to determine the retention rate of hunters and trappers, although some modifications to the questions currently asked of an individual when purchasing a license may be needed to more accurately define a "new" versus a "lapsed" hunter, one who had bought a license before POS was in place.

The HD Specialist was also frequently consulted by the Bureau of Wildlife Management on the question wording, methodology and analysis of mail surveys conducted by that bureau. The HD Specialist was also involved in the completion of the Citizen Advisory Committee (CAC) process and attended CAC meetings in WMU 2G. After the completion of these CACs, the HD Specialist was responsible for initiating the process for a phone survey of the general population that will be conducted during FY 2011-12 by Responsive Management.

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 throughout the country and to our servicemen and women throughout the world. *Game News* also features articles about Game Commission research and management projects, law enforcement accounts by our WCOs, and agency news.

We're in our fourth year of posting entire *Game News* issues online through Nxtbook. The online version allows users to conduct searches, go directly to particular features and, by using a zoom feature, make the type larger and easier to read. Accessing *Game News* in digital formats is a top priority to accommodate our younger readers.

Four individuals won craft awards for their work in *Game News*. From the Pennsylvania Outdoor Writers Association, Linda Steiner received the Best Magazine Column award for "In the Weave of Life" in the March 2010 issue. Also in the March 2010 issue, Cindy Ross won the Best Magazine Feature award for "Hunters Connect with the Chesapeake Bay." Tom Tatum captured the Crossbow Award for "Crossbow Chronicle 2009" in the May 2010 issue. Gerald Putt won the Wildlife Art Award for "Catching the Wind," which appeared on the October 2010 cover.

Game News remains popular on newsstands throughout the state and is now offered in all Wal-Mart stores in Pennsylvania.

In addition to *Game News*, many other brochures and publications, including the Connect with Wildlife calendar, the annual Digest, the annual Pennsylvania Big Game Records book and many brochures and other publications are produced by *Game News* staff.

The Game Commission continues to offer a wide variety of news releases and features about wildlife, hunting and trapping to the news media and public.

The Game Commission continuously updates and adds information to its website to expand and improve the content related to the wildlife resources and agency's management. The popular website is currently boasting 1,996,687 "absolute unique visitors" for the reporting year. This is the number of different people who visit the site.

The Bureau has moved forward with posting a number of videos on the popular "YouTube" websites, and has continued to webcast all quarterly meetings of the Board of Game Commissioners that are held in Harrisburg, and the annual elk drawing.

In the radio market, we have entered our third year of an agreement with RadioPA to provide daily, 3-minute agency-content broadcasts. This programming is then provided to nearly 45 radio stations that subscribe to RadioPA's service.

Enhance the public's understanding of the Pennsylvania Game Commission's mission and its responsibilities.

The PGC, through the Harrisburg Area Community College, offered instructional courses relating to different aspects of wildlife and the outdoors through the Wildlife Conservationist Certificate Program. Other outreach programs include, billboard advertising throughout Pennsylvania and a variety of Connect with Wildlife products. Working on implementing I-phone applications that will further educate and inform the public about PGC sites and available activities.

The PGC developed a partnership with the Pittsburgh Pirates baseball team and the Harrisburg Stampede indoor football team, in providing discount game nights to hunters with a current hunting license. PGC staff was on hand to provide PGC materials/brochures and answer questions relating to wildlife conservation at those games.

Other outreach programs included: Connect with Wildlife magnets, posters, bumper stickers, orange hat with embroidered PGC logo and orange draw string bag, Working Together for Wildlife patches, Field Note patches, Elk Hunt patches, Mentored Youth patch with saf-t plug, Time Collectible Wild Turkey Heritage and Upland Game Bird Series, Waterfowl Management stamp and print, and Wildlife and Habitat buttons.

Develop and enforce laws and regulations to protect wildlife populations and habitat.

The Bureau of Wildlife Protection continues to work toward its mission of protecting Pennsylvania's wildlife through law enforcement, seeking effective legislation and developing regulations.

House Bill 1859 passed into law as Act 54, and penalties for poaching were substantially increased. An intensive statewide training was conducted for all officers and several major poaching cases were prosecuted during this reporting period that included the first ever felony charges and jail sentences for poaching. Numerous cases are still being adjudicated in the court system; however, it appears both District Attorneys and Judges are very supportive of these increased penalties.

In addition, SB 1200 passed into law as Act 60 (Interstate Wildlife Violator Compact) and was implemented January 1, 2011. To date, 2,716 violation records were received from other member states and reviewed; 505 of those violations were serious enough to be applicable to Pennsylvania's standards and the violators were placed on license revocation in Pennsylvania due to the offenses they committed in another member states. This includes two Pennsylvania residents who shot hunters in other states who would not previously have been on revocation in Pennsylvania. Pennsylvania submitted 150 violators that met the criteria into the compact to be evaluated for revocation by other member states.

Anecdotal evidence, as well as actual intelligence gathered by the Special Operations Division indicates that these two pieces of legislation are having a deterrent effect on commercial poachers and chronic offenders.

Enhancements were made to the current deputy program to boost the number of applicants. We had 34 deputy applicants this fiscal year, which is a slight decrease from the previous fiscal year. However, 100 percent of those applicants passed their certification exam and were sworn in before the 2011 fall hunting seasons.

The investment in training of deputies and salaried officers pays direct dividends to the professionalism and technical competence of PGC officers as measured by our enforcement statistics. Officers encountered 18,435 violations during this fiscal year through high visibility patrol, selective enforcement operations, overt and covert investigations, surveillance operations and complaint response. The enforcement action taken by officers encountering those violations resulted in 12,246 warnings and 6,189 citations being issued. Of the violations cited, the conviction rate was 96 percent and attests not only to the discretion, but also the technical competence and professionalism of Game Commission officers. Only six complaints were received against officers this year, none of which were sustained.

Ensuring that our officers have the proper training and equipment to perform their duties is an on-going priority. As an agency we stress the importance of safety, which cannot be stressed enough as so unfortunately was made most evident in November 2010, when WCO David Grove was shot and killed in the line of duty by a convicted felon who had lost his right to possess a firearm.

The top ten violations prosecuted this year indicate that officers are focusing their efforts on violations with the most impact to the wildlife resource. They are:

1. Unlawful taking or possession of Game or Wildlife — 574 prosecutions.
2. Operating vehicles on State Game Lands in areas closed to travel, primarily ATV violations — 396 prosecutions.
3. Hunt or take wildlife through the use of bait or enticement — 340 prosecutions.
4. Possession of a loaded firearm in a stationary vehicle — 279 prosecutions.
5. Cast a light after 11 p.m. — 183 prosecutions
6. Safety Zone violations — 180 prosecutions.
7. Big game tagging violations — 178 prosecutions
8. Hunt or take wildlife through use of a motor vehicle — 177 prosecutions
9. Possession of a loaded firearm in a moving motor vehicle — 142 prosecutions
10. Unlawful use of lights while hunting — 108 prosecutions

The Turn-In-A-Poacher (TIP) Hotline program was placed online in March 2008, and continues to grow and develop each year from information provided by concerned citizens. Last fiscal year 636 calls and emails (a 38 percent increase from the prior fiscal year) were relayed to the appropriate region. The number of successful prosecutions increased, along with the number of reward payments. Twenty-four payments totaling \$6,000 were paid to people who provided information that lead to the successful prosecutions of specific charges.

A computer aided dispatch center (CAD) has been purchased and the pilot project went live in the fall of 2011. The full implementation of the CAD system will provide more detailed incident data.

Develop sustainable funding sources that support the agency's mission and identity.

Our point-of-sale licensing system (PALS) is now in its third full year of automation. While we have had periodic problems with the system, PALS has provided the Commission with a database of licensed hunters that proves to be invaluable. Now we know the demographics

of our hunting population and can survey specific groups of hunters and use that knowledge to better manage our resources and offer maximum hunting and furtaking opportunities.

In time for the 2010 spring gobbler season a new module was added to the PALS system: Interactive Voice Recognition (IVR) harvest reporting. The IVR system makes it possible for hunters and furtakers to report their harvests over the telephone.

The IVR system mirrors the Internet based on-line harvest reporting system but provides a confirmation number as proof of reporting at the end of each report rather than a receipt page as the Internet system does. Hunters should have their license documents handy and call 1-855-PA HUNT1 (1-855-724-8681) to report harvests over the phone.

This past year, following the lead of the Bureau of Wildlife Protection and the Executive Office, the agency embarked on a project to implement a Computer Aided Dispatch (CAD) system. The CAD system will provide automated dispatching capabilities for our network of regionally based dispatchers, promoting efficiency in the disposition of incidents and providing additional officer safety.

We are nearing the completion of our high-speed access project for our Food and Cover Headquarters locations. High speed access provides access to centralized Commonwealth services such as time management, procurement, electronic mail and Game Commission programs.

The Game Commission's Bureau of Wildlife Habitat Management in conjunction with the Bureau of Automated Technology Services are working to hire a contractor to design, develop and implement a web-based solution for systems integration of the agencies ArcGIS spatial and SQL Server non-spatial data. With this new system the Game Commission will have greater flexibility in managing all of our resources and be able to provide better services to our customers.

We have reached the useful end of productivity of our computer mainframe and the application systems that reside on it. With the Office of Information Technology, we performed a Technology Assessment and an Application System Assessment. We are beginning to rewrite all the computer application systems and remove them from this aging platform and add to a server based platform.

The following licenses were issued for the 2010-11 license year:

Resident Adult	647,242
Resident Junior	36,259
Resident Junior Combination	47,225
Mentored Youth Permit	30,790
Resident Senior	22,097
Resident Landowner	931
Resident Military	3,184
Nonresident Adult	48,718
Nonresident Junior	1,854
Nonresident Junior Combination	630
Nonresident 7-Day	2,297
Resident Archery	277,602
Nonresident Archery	11,812
Resident Muzzleloader	174,058
Nonresident Muzzleloader	6,160
Resident Migratory Game Bird License	98,676
Nonresident Migratory Game Bird License	3,648
Resident Antlerless Deer	775,826
Resident Armed Forces Antlerless Deer	3,174
Resident Disabled Veteran	

Antlerless Deer	1,521		
Nonresident Antlerless Deer	18,047		
Resident Adult Furtaker	34,039		
Resident Junior Furtaker	78		
Resident Senior Furtaker	389		
Nonresident Adult Furtaker	245		
Nonresident Junior Furtaker	1		
Resident Bear	156,769		
Nonresident Bear	4,350		
Senior Lifetime Hunting	4,604		
Senior Lifetime Combination	4,447		
Senior Lifetime Combination (Upgrades)	532		
Senior Lifetime Renewal Hunting	76,717		
Senior Lifetime Furtaker	5		
Resident Spring Turkey	14,599		
Nonresident Spring Turkey	559		
Elk (18,253 applications)	50		
Bobcat	15,820		
Fisher Permits	2,783	DMAP (coupons received)	23,779

Total Revenue Received: \$33,759,127

PGC FINANCIAL REPORT

JULY 1, 2010 TO JUNE 30, 2011

The accompanying Balance Sheet and Statement of Changes in Fund Balance were prepared using the modified accrual basis of accounting, whereby revenues earned and available and amounts expended or payable at June 30, 2011, are reported. On this basis of accounting, the June 30, 2011, Restricted Fund Balance in the Game Fund was \$45,835,253, an increase of \$1,439,986 compared to the June 30, 2010, balance of \$44,395,267. Fiscal year 2010-11 revenues earned and prior year lapses exceeded expenditures, resulting in the increase in the Game Fund's Restricted Fund Balance.

All other schedules included in this report were prepared on a cash basis combined with a budgetary encumbrance system. Actual cash receipts reported and credited to the Game Fund during the 2010-11 fiscal year were \$82,987,369, an increase of \$15,789,612 over the previous year's actual cash receipts. During the year, interest on securities and deposits increased \$6,140,932 or 1,785.44% as a result of the restructuring of the investment pools by the Treasury Department.

Adult resident and nonresident hunter licenses decreased \$254,363 or 2.02% and \$246,766 or 4.83%, respectively. However, resident bear licenses increased by \$185,607 or 8.60%. Some contributing factors to this increase could be the new statewide expanded 5-day archery bear season implemented this year and moving the start date of the 3-day firearms bear season to the Saturday before Thanksgiving instead of the traditional Monday before Thanksgiving. Adult resident furtaker licenses also increased by \$74,192 or 13.00% due in part to the sale of two new permits, bobcat and fisher, both of which require either a furtaker or combination license to be purchased. Range permit sales totaled \$107,070 during the year, a new requirement for users of State Game Land shooting ranges that do not possess a valid Pennsylvania hunting or furtaker license. Timber and wood product sales increased by \$1,587,247 or 25.92% partly due to the renegotiation of old timber contract payment plans. Sales of coal, gravel and hay also increased by \$1,265,076 or 246.85% due in part from improved market prices for coal, receipt of an advanced royalty payment of \$1M from Fisher Mining Co., and increased sales of stone related to Marcellus Shale drilling activity and from PGC's lease agreement with Laurel Sand and Stone, Inc. on SGL 79.

Ground rentals and royalties from oil and gas leases increased \$2,266,561 or 93.90% as a result of Marcellus Shale. Federal Aid increased \$3,534,414 or 23.04% primarily from increased funding received from the Pittman-Robertson program. Right-of-way revenues also increased by \$2,793,736 or 121.03% partly due to the increase of right-of-way permits issued relating to Marcellus Shale. PALS transaction fees decreased \$493,124 or 27.13%.

Expenditures and commitments for the fiscal year July 1, 2010 thru June 30, 2011, as of October 31, 2011, totaled \$78,853,648, an increase of \$4,704,883, or 6.35%. Automotive repairs, supplies and transportation rentals increased \$444,178 or 15.92% mostly due to rising fuel costs. Telephone expenses increased \$112,539 or 17.37% due in part from the purchase of radio equipment and software to improve communications for safe implementation of Prescribed Fire, a method used for wildlife habitat conservation on State Game Lands. Legal and specialized services increased \$1,163,412 or 44.26%. Purchase of equipment and machinery also increased \$1,208,351 or 330.28% partly due to the replacement of existing outdated equipment. Electronic data processing contractual services, rentals and purchases increased \$726,679 or 24.47%. Salary, benefits and training costs totaled \$53,576,814, an increase of \$2,450,062 or 4.79%.

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 monies collected for the above are deposited into a separate account.

The number of resident and nonresident licenses sold during the 2010-11 fiscal year, as reported by the Game Commission, totaled 818,557. Antlerless deer licenses sold during the 2010-11 fiscal year, as reported by the Game Commission, totaled 798,568. This mandated that a minimum of \$5,076,003 be expended for the above-mentioned purposes. The actual amount expended and committed in the restricted account during the fiscal year for these purposes was \$6,700,000, an excess of \$1,623,997 over the requirement.