Archive Content

DECEMBER 2005

The Handgun Poacher
By Jonathan S. Zuck, Bedford County WCO

NOVEMBER 2005

Not Seeing is Believing
By Walter "Deet" James Jr., PGC Biologist Aide

Managing Deer — Setting the Direction
By Cal W. DuBrock, Wildlife Management Director

The Water Case
By Robert Einodshofer, Huntingdon County WCO

Keeping Our Wildlife Out of the ER
By Lori D. Richardson, Education Specialist

OCTOBER 2005

Super Funds for Southeast Spurs
By Lori D. Richardson, Education Specialist

SEPTEMBER 2005

The Long Island Boys
By Rodney Mee

Counting Deer
By Dr. Christopher S. Rosenberry

Beginning to See the Forest for the Trees
By Lori D. Richardson, Education Specialist

AUGUST 2005

Atlantic Flyway Wing Bee
By Chad R. Eyler, York County WCO

A Roadhunting Date
By D. J. David, Adams County WCO

Just Add Bats
By Lori D. Richardson, Education Specialist

JULY 2005

Bear Season
By Thomas M. Sabolcik, McKean County WCO

JUNE 2005

The Jacklighters
By Steve Hower, Perry County WCO

Into the Mind of a Violator
By Lori Richardson, Education Specialist

MAY 2005

25 Years in the Works
By Lori Richardson, Education Specialist

Cinnamon Bear at Crooked Pines
By William M. Williams, Sullivan County WCO

APRIL 2005

Duck Chasers
By Lori Richardson, Education Specialist

MARCH 2005

What "You" Think about Hunting PA
By Lori Richardson, Education Specialist

The Game Preserve Poacher
By Michael Beahm, Lehigh County WCO

FEBRUARY 2005

Monday Night Poachers
By Rodney Burns, Greene County WCO

Hunters & Trappers Contribute to the War Effort
By Roxane S. Palone, PGC Commissioner

JANUARY 2005

2004 Commission Annual Report Not Included in This Archive

2003 Commission Financial Report Not Included in This Archive
By Mary K. Delutis, Comptroller

The Handgun Poacher

ON A COLD, cloudy, Friday afternoon during the 2002-03 flintlock season,

Max Sprankel climbed into a treestand and got situated. With dusk approaching, he knew that if he were to get a shot at a deer, it would have to be soon. He wasn't in the tree long before a group of seven antlerless deer walked within range. Deciding none offered a good shot, Max lowered his gun and waited for a better opportunity. His patience paid off when the small herd ambled his way, eventually stopping at the base of his tree. Max picked out a large doe, lined up the sights of his 9mm handgun, and Pow! Six deer bounded away.

The deer Max had shot at lay stretched out on a carpet of frozen leaves a few feet from the base of the tree. Pow! Max fired another round as the deer attempted to get to its feet. He missed. Determined to not let the deer escape, Max scrambled down from his perch and rapidly fired three shots at it, finally killing it. Three days into January and I had my first poaching case of the new year.

My wife and I returned home from church services on Sunday, January 5, 2003, and as I normally do after being away, I checked the answering machine in my office. The red light was "winking" at me. The message was from Deputy Jeff Gainer, saying he had information that a deer had been poached on Friday. Because Jeff lived near the woodlot where the violation had allegedly occurred, I called and asked him to go see what he could find, and to get names and statements from any witnesses.

Jeff scoured the area and found parts from a deer. He gathered the evidence and interviewed a few people living in the area. One witness said that late in the afternoon on Friday, January 3, she saw Max walking down the road, wearing a camouflage hooded sweatshirt, blue jeans and rubber boots, heading toward the woodlot. Approximately an hour later she heard one shot, followed by four more. The witness explained the shots were more like pops and definitely were not from a flintlock muzzleloader. The sound and rapid succession of the shots indicated that we were dealing with someone using a semi-automatic handgun.

Around 5 p.m. that same day another person observed the same man exiting the woodlot carrying a bulging garbage bag. This individual asked what the man's name was and what he was doing. The scruffy bearded man spouted off, "My name is Max Sprankel, and I just shot my first doe, and no one is going to do anything about it!" The person then asked Max what he used to shoot the deer with and Max pulled a black semi-auto handgun from his pocket and declared, "I shot it with this, and what are you going to do about it?"

Max was 34 years old and lived with his parents in a house across from the woodlot. The neighbors perceived Max to be a "unique" individual, one who made them feel uneasy whenever he was around. Due to Max's nature, the neighbors were hesitant about getting involved, and all of them wanted to remain confidential informants. I realized that this may pose problems in getting a search warrant or prosecuting the case, but at this point I had to press on.

Deciding that I needed to pay Sprankel a visit, I picked up Deputy Gainer and we drove to his residence. "Officer Zuck of the Pennsylvania Game Commission," I declared as I knocked on the wooden door of the 2-story farmhouse. While knocking, I noticed a person moving around inside the house, but no one came to the door. I was sure that whoever was inside heard me, but was refusing to acknowledge us. I found out later that Max was home with his parents, and he told them not to answer the door.

With whoever it was inside unwilling to cooperate and my belief that Max may use his handgun against anyone who got in his way, I decided that the best course of action was to come back later with more help and a search warrant.

A WCO for less than a year, I had never applied for a search warrant. I spent the following day

scouring over copies of search warrants I had received while a trainee at the Ross Leffler School of Conservation. After carefully documenting and describing the buildings and vehicles on the Sprankel property to be searched, as well as gathering statements from other neighbors who saw deer or deer parts in Max's backyard, I applied for and was granted a search warrant by the district judge to search the Sprankel premises.

WCOs Jason DeCoskey, Steve Martin, Linda Swank, John Veylupek and Dirk Remensnyder met me at the local township building early the next morning to develop a plan for serving the warrant and conducting the search. After a brief meeting we drove to Max's residence. Max's white Ford Ranger was parked in the driveway, indicating he was probably home. Dirk and I headed for the front door while the other officers took positions around the house. My primary concern was not locating the deer but, rather, securing any and all firearms inside the home, especially the handgun.

"State officers, please open the door. We have a warrant to search your house," I said as I rapped on the door. This time a petite woman cautiously opened the door. It was Charlene, Max's mother. I explained to her why we were there and then asked where we could find Max.

"He's upstairs sleeping," she said.

I told her we needed to speak with him, so Charlene took us up a narrow stairway to a second story bedroom. We woke up Max and secured a loaded 9mm semi-auto handgun near his bed. I escorted Max and Charlene to the living room and advised them they were to remain there until the search was completed.

"Don't you think this is silly?" Charlene asked.

"No," I responded. "This is a very serious matter."

Officers Velupek and Martin interviewed Max and his mother, while the other officers and I searched for deer parts and other evidence of the violation we were investigating.

In the bed of Max's pickup we found plastic storage bags full of partly frozen venison hidden under a snow-covered tarp. We also found fresh meat in a mixing bowl in the refrigerator. Onyx, one of the Game Commission's police canines, along with her handler WCO Linda Swank, helped locate deer parts that had been buried in the snow in a side yard and at the kill site. In addition, in the truck's cab we found a journal belonging to Max. In it Max had written that he was an unsuccessful poacher, but he had it pretty good because no one had ever arrested him for it. At least not until now.

In a written statement Max admitted to killing the deer with his handgun, quartering it in the woods, and then transporting it to his house in garbage bags. Max also said that after Jeff and I had visited his home on the previous Sunday, he transferred the meat from his chest freezer in the basement to the bed of his pickup truck. Max wrote that he knew we would return, so he was hoping to give it away to friends rather than have it confiscated and "fed to the game wardens or their police dogs."

After finding the handgun, deer parts and obtaining a written statement from Max, I felt we had sufficient evidence to successfully prosecute him for the unlawful taking of a deer and hunting with an unlawful firearm. I filed charges and, to my surprise, Max entered a not guilty plea and requested a hearing.

On the day of the hearing Max never appeared to defend himself, and based on the evidence presented by the commonwealth he was found guilty of both violations and lost his hunting and furtaking privileges for two years.

Poaching cases, much like the poachers themselves, come in all shapes and sizes. This one is the most memorable and unusual case I investigated during the three years I served as a WCO in Lancaster County. However, this story is yet another example of the positive outcome of the public

working with the Game Commission. When concerned sportsmen and neighbors care enough to come forward with the necessary information to help prosecute those who steal from our natural resources, we all benefit.

- Jonathan S. Zuck, Bedford County WCO

Not Seeing is Believing

IN JANUARY 2005 I started a new position as a biologist aide with the Game Commission. I am responsible for field research activities in WMU 4B as part of a 3-year study on doe survival, movements and response to hunting activities. I must admit, I consider myself fortunate to have been given the opportunity to be part of the ongoing research on the commonwealth's deer herd. A mere four years ago I was in a secure RV manufacturing job, where I had worked for 20 years, but I wanted an outdoor career. Initially, I decided to attend a local college part-time, and then, in the summer of 2001, I transferred to Penn State, graduating in the fall of 2004 at 44 years of age.

I share the experience of my transition from "factory to field" to demonstrate my interest and pursuit of ongoing education provided by our deer herd. Although we will never have all the answers when it comes to deer and deer management, I knew, in some way, I wanted to be part of this research project to learn more.

First, let me say I'm no stranger to white-tailed deer. I have been hunting and scouting this beautiful animal for 33 years. I spent 3½ years living and working at the Penn State Deer Research Facility under the guidance of manager Donald Wagner. I also earned a 4-year degree in Wildlife Science from Penn State. Let me assure you, though, when it comes to deer, I'm still learning.

After our deer-trapping season ended in April 2005, we had transmitter collars on nearly 50 female deer. Throughout the summer and fall my duties included monitoring movements and survival of these deer by locating each one at least twice a week. It's an amazing feeling to know exactly where an individual deer is hanging out.

Getting that location is accomplished through radio telemetry, a valuable research tool. Radio telemetry involves a receiver, operated by the researcher, and a transmitter collar attached to a deer. To gain an accurate location on each deer, three compass bearings, commonly called triangulation, must be accomplished. The deer's location is the area where the three bearings converge. The location is rarely accurate to a specific point. Instead, deer are considered to be located when the bearings converge within an acre or two.

Despite knowing where these deer are, and spending approximately 20 minutes near each deer, my assistant and I rarely see them. Could these collared deer be wary of us after being captured during the trapping season? In my own experience thus far, I would say no, because several deer in our study have been captured multiple times, a condition we call "trap-happy." Research has also noted that deer will often return to traps despite being handled by humans.

So why should this elusive behavior be so interesting to me, or anyone else for that matter? One reason is because we live in an era of "no deer." In fact, I remember arriving in my study area in early January and was told that, "there are no deer in this area." Well, like the cliché goes, "believe in nothing of what you hear, and only half of what you see," I try to be skeptical of overgeneralizations. Despite the high antlerless deer harvests on the study area in recent years, due in part to DMAP, we still captured nearly 100 deer, half of which were males.

The deer were there this spring to be captured, and now we can follow the movements of dozens of study animals. Yet we rarely see them. To provide some perspective on this, let's look at it in terms of time spent near these deer.

My assistant and I get bearings on 9 to 16 deer per day. For the sake of this example, I'll choose 12 as my deer per day number. Actual time spent on an individual deer is usually about 20 minutes. That translates into time spent on deer at 240 minutes, or 4 hours per day. Now, let's multiply that number by two researchers over a 20-day month - we will not include weekends here. So, on average, we are in proximity to female deer for 160 hours (or nearly seven 24-hour days) every month.

At times I have been so close - and the signal so strong that the receiver could not be turned down far enough to lessen the noise - that I thought, the deer had to be right beside me, yet I couldn't see it.

You might ask, then, have we seen our own collared deer at all? The answer would, in fact, be yes. Thus far my assistant and I have seen just four of our collared deer, for a period of no more than 10 seconds total, usually because they cross a road or trail ahead of us. If you analyze that 10 seconds of actual sightings versus the actual time spent taking bearings as a percentage, well, the amount of time we actually see deer we know are there is infinitesimal.

Now, remember, we know these deer are there, even though we don't see them; the transmitter and receiver don't lie, and I can't begin to imagine how often the average person is in the woods, and has deer so close, but has no clue any are even around.

Although deer populations have declined in recent years in many areas, our experience with "known" deer demonstrates the whitetail's ability to remain hidden. It also demonstrates the problem in making the leap from individual observations to generalizations of larger areas. Again, I'm not at all dismissing the fact that deer numbers have changed in many parts throughout the state, but our experiences do shed new light on the often heard comment of "no deer" as a common generalization of deer in the state.

In closing, I would just like to say that my intention for this article was to provide some insights into the wonderful world of the whitetail deer. It's not meant to dismiss hunter concerns or any personal comments on the state's deer herd. Rather, it's meant to open the window of knowledge and understanding. Deer, like other prey species, have the incredible ability to remain unseen, to lie motionless, moving only when forced or when the element of danger has passed. White-tailed deer have evolved to survive that way. So, perhaps at least once in a while, when we may think they're not there, in reality, they just may be.

- *Walter "Deet" James Jr., PGC Biologist Aide*

Managing Deer — Setting the Direction

THE BASIC GOAL of wildlife management is healthy, functional wildlife populations that are socially acceptable. This goal is most commonly approached with species management plans.

It's often said, "If you don't know where you're going, then any path will get you there." Analysis and planning are essential to solving any issue and getting on the right path. You need to start by reviewing the current situation, then decide where you want to go and what you hope to achieve. Next, identify what needs to be done and do it. Follow up by routinely re-evaluating the situation relative to your goals.

In 2001 Game Commission staff began developing a deer management plan. Initially, the natural history of deer, past management efforts and management options were summarized. The purpose of doing this was to bring everyone with an interest in deer management to a common understanding of the past and present condition of deer populations, their requirements, status in the commonwealth and management practices that had been employed over the years. It's best to think of this step as the "inventory" stage of the planning and management process.

The agency was committed to using a stakeholder process for public input on deer management goals, i.e., the direction deer management might take. A "stakeholder" is a person who has an interest in or is directly impacted by an issue. A stakeholder list of organizations and individuals was developed, including staff within the PGC. Twenty-nine key stakeholders were invited to a meeting to identify goals for the Deer Management Plan; External stakeholders represented interests of: sportsmen, agriculture, forestry, environmental conservation, federal and state agencies, and urban-suburban municipalities. Two legislative and nine PGC representatives were invited as internal stakeholders.

The meeting was held at the C. Ted Lick Conference Center on the Wildwood Campus of the Harrisburg Area Community College in July 2002 with 27 participants present. Management consultants from the Bureau of Management Consulting in the Governor's Office of Administration facilitated the meeting. During the "icebreaker" session each participant was given the opportunity to tell a brief story about their first hunting experience. Twenty-four of twenty-seven members spoke about memorable hunting experiences, three participants who'd never hunted spoke about other nature-based experiences. The facilitator then outlined ground rules, which promoted a productive and expedited meeting. The history of deer management in Pennsylvania and associated issues and controversys were covered, and the group was brought up to date with recent changes in deer management that have been made in the past several years. Then the group was asked to identify primary characteristics of an award-winning Deer Management Plan. Following this discussion, the group broke into five smaller groups and each group was asked to develop a vision statement. All the participants reconvened to review the vision statements developed by the five smaller groups. One vision statement was unanimously supported. Revisions were made as a group and the vast majority agreed to the following vision statement:

> *We will manage deer to restore and provide healthy and sustainable ecosystems with a healthy, viewable, huntable deer herd throughout the commonwealth for the benefit of our citizens and natural resources compatible with other species and land uses.*

Next the participants defined goals to guide the PGC in managing white-tailed deer herds. The group developed eight goals but agreed that two were actually objectives supporting one or more of the other goals; thus the group unanimously agreed to and prioritized six goals:

1. To improve the health and sustainability of the ecosystem
2. To provide public and private landowners with the deer management tools they need to achieve their land use objectives
3. To improve and maintain a healthy deer herd
4. To increase recreational opportunities involving deer

5. To increase citizen understanding of healthy ecosystems and deer herds

6. To reduce human/deer conflicts

Facilitators reviewed goals outlined during the meeting and the participants were informed that the PGC would review them with top management and policy directors, make adjustments as needed and begin developing management strategies to meet the goals and objectives.

Following the meeting, the Deer Management Section biologists worked with internal stakeholders to review the goals and to refine objectives and strategies. Ultimately the six goals identified by the stakeholder group were consolidated into three major, overarching goals focusing on healthy deer, healthy habitat and human health and safety.

The management plan was reviewed and approved by the Executive Director and Game Commissioners on the Wildlife Management Committee then posted on the PGC website in June 2003. Those interested in viewing the plan are encouraged to visit www.pgc.state.pa.us.

- *Cal W. DuBrock, Wildlife Management Director*

The Water Case

"YOU JUST missed him." "I saw him do it, but I won't testify." "If I tell you, they'll come back on me." I hear those statements all too often, but one family finally had all they could take. Every year there always seemed to be a large buck on their property or adjoining property that would never make it to the season. Then came the evening of Sunday, November 24.

Around 7 p.m. Deputy Lanny Cornelius received a call from a member of the family who said they had just noticed a spotlight and heard a shot below their house. Two of the family members jumped in their vehicle and as they reached the end of their driveway, a truck sped past them. Their headlights illuminated the inside of the suspect's vehicle, though, and they identified Mike Water as the driver. They couldn't identify a second person, nor were they able to get the license number.

When Deputy Cornelius arrived, the witnesses were at the field where the spotlighting had gone on. Searching along the road Deputy Cornelius noticed a group of deer that didn't seem to want to leave the area. A quick scan of the field soon revealed a 10-point buck that had, it turned out, been killed by a single gunshot. Lanny photographed the evidence and obtained written statements from the witnesses. Knowing the history of the suspects he was dealing with, and finally having enough evidence and witness support to prosecute, he waited for backup to arrive.

Within minutes Fulton County WCO Travis Pugh arrived, along with Fish and Boat Commission WCO Corey Britcher and Deputy Berley Souders. Deputy Cornelius and WCO Britcher went to the residence of the suspect's father, while WCO Pugh and Deputy Souders went to the suspect's residence. Cornelius and Britcher were informed that Mike had not been there, so they sought out WCO Pugh. WCO Pugh found Mike Water at his residence and was told he had been there all evening and, of course, had no involvement in any poaching.

I had no idea all this was transpiring until I walked in the door from being out with friends for dinner and noticed my answering machine blinking. Immediately, I was out the door to help. When I met up with everyone, we went to do a necropsy on the deer. Luck was with us as I found a jacketed bullet from the shoulder opposite of the entry wound. I could tell it was a .22. We knew from WCO Bircher's case against Mike Water for poaching walleyes the previous spring that he owned a .22-250, because it was in the vehicle during that incident. A coincidence? We thought not, and decided that WCO Pugh, because the suspect lived in Fulton County, would apply for a search warrant the following morning.

The following morning was the opening of bear season, so we all conducted our routine patrols until Travis notified us he had the warrant. Around lunchtime, WCO Pugh, Rich Palmer from the Bureau of Law Enforcement in Harrisburg at the time, Deputy Cornelius, Deputy Coy Hill, WCO Britcher and I, along with PGC videographer Scott Rheam, served the warrant.

Our main focus was to locate the firearm and any unlawful wildlife that may have been taken. Little did we know how big this search was about to become.

The first major discovery was a large trash bag full of trophy deer racks found in the basement. As the officers proceeded upstairs they located a gun cabinet and the firearms. As WCO Britcher was searching the drawer of the cabinet for ammunition, he found a spiral-bound notebook listing dates, animals and caliber of firearms used for many unlawful kills.

When the search of the house was complete, we moved to the outbuildings and vehicles. There, in a shed, a large box of deer racks was found. This brought the total antler count to 42 sets. Mike's pickup was in the driveway. After searching the vehicle it became obvious that this guy was a killing machine. Several boxes of .22-250 ammunition, both loaded and spent cases, were found in the truck, along with a receipt of purchase only several days prior. Twelve gauge shells, .22 and .223 ammunition was also scattered throughout the vehicle. A spotlight and a 7mm rifle were lying on the front seat, with five live cartridges in the cup holder on the dash. Strangely enough, we did not find

a .22-250. The truck bed had just been washed, but dried blood was evident on the tailgate. Satisfied all the evidence had been collected, we left.

Several days later we met at the region office to start sorting through the evidence and preparing it for testing. It was then we realized that deciphering the evidence was going to be like solving a 1,000-piece puzzle. We laid out all the deer racks and began trying to match them with dates in the notebook. Some entries were more specific than others. Many were just listed as "8-point," say, but others were more specific stating, for instance, "8-point with 16-inch spread." Some were old and some were fresh. Several still had velvet on them.

We were able to match all of the racks we had to entries, but there were 40 or so other racks recorded that we hadn't found. We also discovered that we didn't have any beards for the 54 gobblers he had recorded. These entries were very specific, from 1/4- to 10-inch beards. The most intriguing discovery was that for 26 years he kept records, but the notebook suddenly ended in March 2001. We then recalled that he had a computer at home. Could this outlaw have gone "hi-tech" on us?

Several weeks later, after sorting out everything we had, we met with the Fulton County district attorney about our findings and our suspicions that Water's record system might now be computerized. At this point the DA wanted more information before prosecuting. If the computer held more recent records he would feel more comfortable, and he instructed us to draw up a warrant for the computer.

On December 17, we served the second warrant, for the computer, discs and related evidence. We thought this would be a simple search, until fresh meat was discovered and the turkey beards were found in an ammo crate. Travis immediately tried to locate the on-duty district justice, to obtain another search warrant, and several hours later, he returned with one. In the ammo box were 53 of the 54 turkey beards Water had recorded, and we now felt confident we had all the evidence needed for prosecution.

We reviewed the case with both county district attorneys and discovered we weren't done with serving warrants yet. While our warrant was good to seize the computer as evidence, the wording we used didn't allow us to access the contents of the computer. Now that the evidence was stored at the region office in Huntingdon County, another warrant had to be drawn up in Huntingdon County and served to Mr. Water to have its contents downloaded, as well as the undeveloped film that had been seized. All legal grounds now covered, everything could be submitted and analyzed.

We knew this was going to be a complex case. The statute of limitations had run out on most entries as far as the illegal killings, but we did have possession of parts of illegal deer and turkeys. We knew that part of his defense would be to simply claim to have killed a buck and a turkey every year that he hunted. Checking, we learned that Water had never filed a harvest report card here or in any of our adjoining states. Deciphering his notebook had taken many hours, and we figured there had to be an easier way to find out which animals were killed legally in season and which were not.

LMO Steve Kleiner volunteered to work up a computer program that could process the entries if we provided him with the information. So, into the realm of computer data entry I went. In the end, a touch of a button told us if each animal could have been killed in season, was out of season or multiple kills in season. All the seasons and bag limits were supplied by Harrisburg dating back to 1979. What that allowed us to do was give Water the benefit of the doubt for 10 deer racks and two gobblers that could have been killed legally during the season.

Now we were ready. After consulting with district attorneys from both counties, the decision was made that the poaching incident that started the investigation and what was subsequently discovered during the searches were unrelated cases, and we would not have to consolidate the charges.

On March 14, 2003, one count of unlawful use of lights while hunting and one count of loaded firearms in a vehicle were filed in Huntingdon County, and 86 counts of unlawful possession, one

count of failure to file a report card and one count of failure to sign a license were filed in Fulton County. The Fulton County case was heard first, on June 23, 2003, and in a packed courtroom Michael Water was found guilty on all 88 counts and ordered to pay fines of $27,750 and $420 in laboratory fees.

Three days later, in Huntingdon County, Water and his counsel failed to show for the hearing. The case was held in abstentia, again in front of a packed courtroom, and he was found guilty on both counts and was ordered to pay fines of $700 and laboratory fees of $1,715. The defendant has appealed the decisions to both county courts.

This is not the end of the story. Three days after the case broke, the intimidation of witnesses started: Nails were placed in driveways; an entire pasture of high tensile fence was cut; lug nuts on a vehicle were loosened; a gas tank on a pickup was punctured; a skinned and headless deer carcass was placed below a driveway; bullet holes were found in pole buildings; deer heads in front yards and, most serious, two cattle were killed by arrows. These families never had problems until they reported this information, and this is probably a main reason witnesses never came forward before with information on this poacher. The witnesses are to be commended for their willingness to come forward and report these wildlife crimes.

- Robert Einodshofer, Huntingdon County WCO

Keeping Our Wildlife Out of the ER

PROSPECTS for our nongame wildlife most in need of help are looking better and better. For the fourth year in a row, Congress has appropriated - and the President has approved - millions of dollars of federal aid to support wildlife management for species of special concern. The aid comes in the form of State Wildlife Grants (SWG).

Some call it non-traditional funding for non-traditional species. Lisa Williams, PGC Wildlife Diversity Biologist, calls it "keeping common species common." She says that this proactive, rather than reactive, approach to wildlife management "gives us time to intervene while we can still make a difference - before these species need expensive emergency room-type care like those on the endangered and threatened species lists."

SWG money is available only to state agencies responsible for wildlife management. In Pennsylvania, where we have two agencies responsible for wildlife (the PGC for mammals and birds and the PFBC for fish, amphibians, reptiles and aquatic invertebrates), the agencies work together to compile a group of projects that reflects the species most in need.

Federal funds acquired must then be matched, 25 to 50 percent, depending on the types of projects approved. Matching money, often in the form of in-kind services, comes from both agencies as well as the third party conservation groups and universities involved in the approved projects.

This year the President approved $80 million for SWG, and Pennsylvania will receive $2 million. Since the program's inception, the state has received nearly $8.4 million. Further, by partnering with conservation organizations statewide we are stretching the benefits of those funds and amplifying the effects of our efforts.

All of the funding is directed by the state's new Comprehensive Wildlife Conservation Strategy (CWCS), a plan Congress requires of each state receiving money. When creating our draft CWCS, we solicited thoughts from conservation organizations across the state. When completed, the strategy will prioritize wildlife and wildlife habitats to allocate grant monies and management efforts most appropriately statewide and across both agencies. "We've submitted a draft to Congress," Williams says, "and we want to spend the next year working with our conservation partners and interested individuals to refine the plan and start implementing it on the ground at regional and local levels."

Most SWG funding is devoted to baseline research to help us learn more about the state's 164 mammals, birds, fish, reptiles, amphibians and invertebrates we believe are at risk, including those that are threatened or endangered. Funding also supports wildlife diversity biologist positions and land acquisition.

Many species' population declines are tied to declines in available habitat. And, in turn, multi-species management is a technique gaining momentum, because it is often more effective to focus on a specific habitat that benefits many species than to concentrate lots of effort on a single species. Barrens habitats, for example, are an important component of this year's grant projects because they support many imperiled species and require specialized managment. Other habitats hosting large percentages of species at risk are wetlands, grasslands and large blocks of forest.

"Some of the commonwealth's biggest conservation concerns are invisible to most people," says Williams. "For instance, 90 percent of the shorthead garter snake's global range is in Pennsylvania. The snake tends to get overlooked here because it's abundant, but if we lose it here, it's likely to be lost completely. The shorthead is threatened by the same issue as many of our at risk birds - loss of moist grassland habitat.

"We're also keeping an eye on the Allegheny woodrat; it has disappeared from all neighboring states except West Virginia. Pennsylvania is vitally important because we have a large percentage of the woodrat's remaining population, despite the fact that we're on the northern edge of its range. The

problem with the woodrat is that while both its range and population are decreasing, nobody knows why."

That's why SWG funding is so important: For the first time in history we are in a position to manage declining wildlife populations before they reach critical levels that require expensive and intense management efforts, before they reach such dire straits that even our best efforts may fall short. Whether you're a hunter, trapper, fisherman, seasoned birder or casual wildlife observer, Congress has given us a chance to preventatively and proactively protect your valuable wildlife resource; be sure to ask your congressman to continue supporting State Wildlife Grants and the important management efforts they're funding to keep our wildlife out of the emergency room.

- *Lori Richardson, Wildlife Education Specialist*

Super Funds for Southeast Spurs

JUNE 16th - three days after the passing of one of the National Wild Turkey Federation's and Pennsylvania's finest - Jerry Zimmerman. Jerry was well known throughout Pennsylvania's conservation community for his optimistic approach and commitment to wild turkey management and hunting heritage. It's only fitting that I am out in the field today learning how dedication like his gets put to work on the ground through the National Wild Turkey Federation's (NWTF) Super Fund program.

In the parking lot at Middle Creek Wildlife Management Area I chat with NWTF Regional Biologist Bob Eriksen about good friends and good times. Southeast Land Management Officer Rich Skubish arrives shortly to escort us on a tour of Super Fund projects on State Game Lands of the southeast.

Eriksen has been a Regional Biologist for NWTF for four years. His territory includes Pennsylvania, New Jersey, Maryland and Delaware, however, the NWTF State Chapter and the PGC primarily fund his position, so his priority is assisting the Commission with wild turkey management.

Skubish has worked for the Commission since 1977 and has spent 21 of those years as an LMO. Today he'll be showing us some of the habitat enhancement projects he's completed and is working on.

As we turn in next to a Game Lands building we meet some of the maintenance workers whose labor puts Super Funds on the ground. Eriksen tells Skubish, "I've spent 29 years with other natural resource agencies and never seen anyone be able to do the habitat work that you all do. I know it's working because we're seeing more turkeys. I'm really impressed and I hope hunters recognize and appreciate the hard work." He adds, "The folks out in the field are really putting in a lot of effort."

The Hunting Heritage Super Fund was established in 1983 and is a combination of monies from fundraising banquets and corporate sponsorships. Super Funds have enabled NWTF to work with state and provincial agencies to promote wild turkey restoration throughout North America. The habitat work, however, helps many plants and animals, and provides numerous recreational opportunities for hunters and non-hunters alike.

Since 1985, more than $3.7 million has been raised and spent in the commonwealth. The majority is spent on habitat enhancements such as maintaining and developing brood habitat, planting trees, seed subsidies, creating forest openings and purchasing equipment. Other monies are spent on scholarships, teacher workshops, field days, and hunter education. Super Funds also support wildlife management and law enforcement by funding research and land acquisition, and supplying equipment such as scales and surveillance cameras.

In 2004 NWTF spent more than $190,000 on 60 habitat enhancement projects in Pennsylvania. The impact was felt in 48 counties on nearly 2,500 acres of land open to public hunting, and the NWTF makes similar large donations on an annual basis.

In 2005, 66 projects totaling $164,394, enhanced the commonwealth's wild turkey habitat. Because of the intense interest of LMOs and local NWTF chapters, 46 of those projects and more than $83,971 were spent on State Game Lands.

Most of the Super Fund money is raised at banquets held by local chapters. Pennsylvania has the seventh largest membership base, with 72 local chapters encompassing more than 22,000 volunteers.

Eriksen says, "I get to meet a lot of chapter members at banquets and I can hardly believe the commitment these guys have. They're so focused on improving habitat and they put in countless volunteer hours educating, fund raising and doing habitat work." He adds, "Local banquets also allow conservation-minded individuals, who are unable to invest a lot of time, a way to contribute to wild turkey management."

The LMOs foster good relationships with local chapters and often attend several local banquets each year. Many submit Super Fund requests annually. LMOs and other staff determine what the limiting factors are for turkeys in an area they are working in. Then, after creating a habitat enhancement plan, they apply to NWTF for funding. NWTF reviews the applications and selects projects to support.

Once a project is approved, LMOs often make arrangements to help stretch their Super Fund dollars by coordinating with timber companies, local logging crews and school groups. As a result, they are able to enhance more habitat and keep PGC costs down.

At SGL 156, our first stop, the limiting factor for turkeys is the availability of openings in the forest where birds can forage. Less than one percent of 156 is considered this type of habitat. In the spring and early summer, when poults (young turkeys) are growing, they need lots of protein. Small forest openings are great brood habitat. The turkeys feel safe being close to escape cover and the legumes and grasses are perfect for buggin' (gleaning protein-rich insects from the grasses).

Skubish has been using Super Funds to create openings by clearing the forest; planting grasses, legumes and fruit and nut bearing trees and shrubs; and maintaining the openings over time. Once an opening is established, it must be maintained with annual mowing and lime and fertilizer every three to five years.

Roadways created while logging the openings make travel corridors between them. A series of three or four small openings connected with travel corridors totaling about 10 acres provides fine turkey habitat. In some of the wider roadways, sawtooth oak and crabapples can be planted for fall and winter food. Keeping travel lanes vegetated and mowing them late in the season provides both cover and foraging areas. While mowing the boarder openings early in the season creates short grass that is good brood habitat. Clover and trefoil are good for areas like this; if they are a little sparse in the spring, the poults are able to move through it without much trouble.

"People often don't consider that if they already have openings, just mowing them once a year will keep exotics like autumn olive and multi-flora rose out. You don't have to create new openings if you maintain the ones you have.

Eriksen especially liked the openings Skubish has been implementing that get lots of sunlight because they are good for the spring green-up and also for winter growth, providing valuable habitat components year-round.

In larger openings Skubish had planted scattered sawtoothed oaks and crabapples and Eriksen suggests mowing underneath each tree because the shorter, mowed vegetation makes it easy for birds to find fallen fruit and mast.

The second limiting factor on most SGLs is good winter forage habitat - fruit bearing trees and shrubs or corn and sorghum for when the snow cover is deep. Managing places where groundwater springs to the surface, encouraging herbaceous vegetation and melting the snow, can offer winter food, especially where mast falls near the seeps. In the future, conifer stands, which provide winter thermal cover, may turn out to be a limiting factor.

We visit several projects on other Game Lands and discuss how the hunting pressure in this part of the state is heavy at times because of the proximity to highly populated areas. There are often hundreds of cars in parking areas during deer season and a fair amount during spring gobbler as well.

At our final stop, SGL 242 in York County, there is a mix of agricultural land and forest. This project began last year. Over eight acres of old, overgrown orchard are being stumped to create a clearing with strips of annual and perennial grasses and clovers and conifer blocks. We watch as Game Lands maintenance workers Dave Schultz and Michael Backel clear out locust and multi-flora rose. They tell us about seeing hens out here in the evening and Eriksen notes that the location is excellent for brooding and foraging and, hence, a great place to enhance habitat.

Skubish explains that the PGC supplements these openings with food plots on more than 75 acres and concludes, "All the stuff we're doing, we wouldn't be able to do without NWTF Super Funds. The funding helps us enhance and then maintain the habitat; it is a real good partnership for us. NWTF has created a nice, diverse habitat that's good for ALL wildlife."

I didn't know Jerry Zimmerman personally, but I understand that he never failed to make a point of saying "Thank you," to folks working toward the conservation of wild turkeys. I think he would have been proud to see the fruits of his chapters' Super Fund projects enhancing wild turkey habitat on State Game Lands and providing outdoor opportunities for all Pennsylvanians. I believe he would have shaken the hand of LMO Skubish along with each Game Lands employee we met and thanked them for their hard work.

Thank you, Jerry, for your dedication and leadership. Your legacy is great and Pennsylvania is greater for it.

- Lori D. Richardson, Education Specialist

The Long Island Boys

With a bountiful array of wildlife and relatively untamed forests, Pennsylvania is a dream playground for outdoor enthusiasts from all over. For some, however, the wildness gives rise to selfish ambitions.

DURING THE WINTER of 2003-04, as a new officer here, I was still adjusting to this sparsely populated district. I had transferred from York County, where it's hard for anybody to do anything without someone watching, which led to many tips. That's not the case here. Information is harder to come by, and being relatively new to the area, I did not have a strong communication network.

The winter would show signs, though, that I was beginning to make some headway. One Sunday in February my family and I were at church when an acquaintance approached. "Rodney, I need to talk to you."

He said that during the hunting season a deer and a bear had been poached near the little town of Stony Fork, on land owned by a Mr. Kricket. Turned out, I had helped Mr. Kricket with a nuisance bear problem the year before. My visit with him was pleasant and I was able to help him solve his bear problems. And because he was so concerned about doing what was right at that time, I found it hard to believe that he would be involved in any sort of poaching.

Without any real details to go on, I paid Mr. Kricket a visit. He greeted me warmly and invited me in.

"Mr. Kricket, I've been investigating a case involving a bear and a deer being illegally killed, and the evidence is pointing to your property. I find it hard to believe that you would be involved, but I'm wondering if you know of any such thing going on here."

With a great sigh of relief, Mr. Kricket began, "My son-in-law, Mick, was hunting here with his son-in-law, James, and James' twin brother and some friends. They built treestands in my woods and went hunting on the first day of deer season. I was in the house, listening to them on my radio when I heard they had shot a bear. I knew it wasn't bear season and I was furious."

Mr. Kricket went on to describe how the group used his ropes and other items to drag out a 300-pound female bear and hang it in his garage. He said that later that same week one of the younger hunters, with a light, shot a large buck, but not on his property.

As I was leaving, I gave Mr. Kricket my phone number and asked him to call me if he received any more information.

I barely got back to my office before my phone rang. It was Mr. Kricket, and he had just spoken with his son-in-law, Mick, and Mick wanted to talk to me. The next morning I interviewed Mick at his kitchen table, with his wife and daughter chiming in when they had something to offer. Given the seriousness of the violations, Mick seemed overly cooperative. As the interview progressed, it became apparent that there was major friction between Mick's household and his son-in-law, James Maddon, and his gang of friends.

Mick said that on the first day of deer season he, James, James' twin brother, Barry, and Matt Soda went deer hunting on Mr. Kricket's property. Mick told everyone that Tioga County was included in the extended bear season. So, when a bear walked near James, he radioed everyone that he was going to take the shot. Once the bear was down they all dragged it out of the woods.

Later that day, Tommy Quill, a friend of the Maddon twins, showed up and helped to load the bear onto a trailer. Apparently, before the bear was loaded up, James Maddon realized that the temporary bear tag on his general hunting license was not valid, because he hadn't purchased a bear stamp. Mick said he would tag the bear, because he was the only one in the bunch who had a bear license. The group took the bear back to the Mick's residence and then searched the Internet to find a location in a wildlife management unit where bear hunting was permitted during the first week of deer season, to put down as a kill site for the bear.

In our interview, Mick made it sound as though he got involved only to shield his son-in-law. After all, he was the one who had led the others to believe that bears were legal game that day, so he should be the one to take the bear to the check station.

With Mick's written statement about the bear, and a list of all who were involved, I asked Mick about the deer. Mick, along with his wife and daughter, went on to describe how Barry Maddon and Tommy Quill went out at night and shot a big buck, brought it back to Mick's house and hid it under a tarp on Mick's trailer. I collected dried blood from the trailer for DNA analysis and then left with what I thought was a good case.

James and Barry Maddon, and Matt Soda and Tommy Quill all lived on Long Island, New York, so I contacted the New York Department of Environmental Conservation (DEC). If the deer had been taken across state lines, a Federal Lacy Act violation had occurred. Lieutenant Huss, Officer Otterstdt and a couple other DEC officers arranged to interview the suspects at James Maddon's home.

When the officers arrived they were met with a barrage of protests. The Long Island boys were mad at being "ratted out" and retaliated against Mick. They all gave written statements describing how Mick had also killed a bear, a cub, right after James shot the big female. Because only Mick had a bear license, and because the cub was so small, they just left it in the woods. Tommy and Barry (the deer suspects) both denied that the deer had been killed illegally.

When I received the statements and the DEC officers' accounts, I was skeptical, especially because they denied that the deer had been taken illegally. Things were getting messy, with a lot of finger pointing going on.

By late March the snow had finally melted enough for me to investigate the scene of the bear killing. I was especially anxious to see if I could find any signs of a second bear being killed. After locating everyones' treestands I began my search. With the snow less than a foot deep I figured I could find signs of some sort of animal activity near a carcass or other remains.

Searching around John Maddox's stand I came across a patch of matted down weeds covered with snow. I quickly dug down and pulled up a handful of bear remains. This had to be where the female was killed, I figured. Now all I needed was to find the cub. After combing the area for hours with no further success, I began to wonder if the cub was just a fabrication of the Long Island boys to take the spotlight off the deer case.

April came, and with no snow on the ground, I went back to look for the cub.

Within 10 minutes I noticed a pile of limbs near Mick's stand, and there it was, about a 60-pound male cub. I photographed the carcass and marked the location with a GPS.

To no surprise, I also found that the treestands had been baited with liquid mineral deer attractant, a type of bait used because it supposedly can't be detected by "game wardens." I also found anis oil bottles. With anis being a bear attractant, the violations were stacking up. It was becoming more and more apparent that these guys were not guilty of just momentary lapses in judgment. This growing amount of evidence clearly indicated a premeditated, grossly illegal hunt. It was time to pay Mick another visit.

This time my supervisor, Ron Stout, came to help. Ron had checked the 300-pound bear when Mick Simons and James Maddon brought it to the Northcentral Region Office during the late bear season.

At the time Ron sensed something was out of place. He noticed that Maddon didn't come to the back of the truck to watch the bear being processed, something most every hunter is anxious to see. Ron also thought it odd that Simons brought the bear to the Northcentral Region Office instead of a check station in the extended bear season zone. At this point, Ron was glad to get a second chance to test his intuition.

Mick brought his wife along to the interview, which I thought was strange, but later would realize that he had no real choice. Before we even got started Mick stopped us and said, "There's something else I haven't told you about the bear."

I responded with a rather suppressed, "Okay."

Mick went on, "My wife didn't even know about this until today, before we came, but there was a second bear." Mick's wife glared at him, seemingly driving him to tell us the whole truth. Mick said that he got excited when he heard James Maddon shoot and saw the cub running toward him. He thought it was the same bear James had shot at and just started shooting. Afterward, when it became obvious what had happened, he had the others hide the cub and swore everyone to secrecy.

We finished the interview and sent Mick home. Ron and I concluded that none of them had any desire to follow the game laws or had any second thoughts about destroying two magnificent animals, leaving one to rot in the woods. Further, Mick obviously wasn't the responsible elder he purported to be, but rather the ringleader.

One thing was left, the deer. New York DEC had confiscated the deer head of the buck from a taxidermist on the reasonable suspicion of it being illegally taken at night, but we needed more to make the arrest.

Then, in late April, I received two phone calls. One from Tommy Quill, wanting his deer back, and the other from James Maddon's wife, Linda, wanting to know what was going on. They both told me that the deer tag for Tommy's buck had been filled out by Linda, because Tommy couldn't read or write. Linda didn't hunt, and definitely was not with Tommy when he killed the deer. The deer wasn't tagged at the place of kill, was transported unlawfully back to the Simons' residence, where Linda filled out the tag for Tommy, and then taken to New York.

We had them, federally speaking: The deer had been handled unlawfully in this state and then transported out of state. We did not need anything more to file charges.

I contacted Lee Schneckenberger of the U.S. Fish and Wildlife Service to inform him of the violations. Lee set up an interview with Tommy Quill and Barry Maddon. In the meantime, I filed charges for the bear against all the Long Island boys, as well as Rick for taking two bears - the cub and for aiding in possession of the female bear.

Lee was able to get only Tommy to talk to him; Barry always seemed to be busy. Tommy, however, wouldn't come to reason on the deer. He tried to get Tommy to understand how much greater a federal misdemeanor or felony would be if he did not take care of the deer charges in Pennsylvania. Tommy's response was, "I'll take my chances." (Generally, the USFWS prefers to see these types of cases settled in the states where they occurred.) Lee decided to let us take care of the deer charges, because Tommy was coming to Pennsylvania for his hearing on the bear.

The rest of the Long Island boys weren't happy with the charges either, and took hearings for the aiding in possession of bear charges. On the hearing day all the Long Island boys showed up ready to fight the bear charges. Only James Maddon and Mick Simons pled guilty. The hearings became heated, and at one point the judge was ready to throw Tommy Quill out of the courtroom if he did not control himself. Then, between hearings, the county sheriff nearly threw Tommy out of the courthouse for disorderly conduct. I supported the officials in their quest to regain order, but I needed to press Tommy one more time about the deer before he left. The sheriff was reluctant, but gave Tommy another chance to behave.

Three hours later, District Justice Sweet found all the Long Island boys guilty of all charges. The fines and restitution was $7,700. He gave the Long Island boys the benefit of the doubt and allowed them to set up payment plans.

Our celebration was short-lived because we still had the deer case to settle with Tommy and Barry.

Before they left for home I made one last attempt to encourage them to settle the deer case in Pennsylvania and avoid federal charges. To my surprise, they said they would talk to me. We ventured back into the courthouse and found an empty room to meet in. WCO Supervisor Rick Macklem was with me that day, because he was the one who had confiscated the bear from the taxidermist. Rick did a great job laying out the options, and was a big help in appealing to the two poachers. Tommy was still reluctant to talk, but Barry was ready to put the whole thing behind him, especially with federal charges looming. They gave us the whole story, or at least most of it. We had enough to file another $1,400 in fines for the two. It was time to put the case to rest.

The Long Island boys will be receiving three to five years revocation on top of the fine. At the time of this writing, though, the Long Island boys had defaulted on their payments, and warrants had been issued for their arrest. Because Tommy and Barry did not respond to their deer charges, I withdrew them to allow USFWS agent Lee Schneckenberger to file federal Lacey Act felony charges. Lee and U.S. Assistant Attorney Lara Gatz were able to enter a plea bargain with Tommy and Barry of one count of Federal Lacey Act Misdemeanor. They were sentenced to pay $822 each for the deer violations and pay the balance of the bear charges, with all the monies going to the Pennsylvania Game Fund.

- Rodney Mee

Counting Deer

By Dr. Christopher S. Rosenberry - PGC Wildlife Biometrician

How many deer live in Pennsylvania? How many deer do hunters harvest each year? These two questions generate a lot of discussion among hunters and nonhunters alike. Biologists, farmers, motorists and countless others wonder about these questions. Unfortunately, estimating deer populations and harvests is not simple, nor without controversy. Each year the Game Commission calculates deer harvests, and then from these, population estimates. Although many factors influence the confusion and controversy surrounding these estimates, perspective and uncertainty are probably most responsible.

Perspective

Just as three important words in business are "location, location, location," three important words when discussing deer populations are "perspective, perspective, perspective." A person's perspective, or viewpoint, is often the foundation for their thoughts on deer population estimates. Hunters often base their estimates on what they see where they hunt. Farmers may base their deer population estimates on the number they see in their fields. Game Commission biologists base their estimate on data collected at the county and state levels.

Each person's perspective influences his or her deer population estimate, and the three may not agree. The hunter who sees only a few deer during the season is likely to conclude that deer populations have dropped. A farmer who has just watched a dozen deer graze across his soybean field may conclude that deer populations are increasing. Finally, a biologist may be looking at data that indicates the population is stable. In each case, there are limits to a person's perspective.

How deer are distributed also affects a person's view of deer populations. Deer are not uniformly distributed across the landscape. Some areas will have higher deer numbers than others. Location of food and suitable habitat, as well as hunting pressure, influences the number of deer in any given area. Differences between high and low populations may not be quickly corrected by deer moving from high to low population areas. Deer typically do not "flow" across the landscape. In fact, social structure and behavior may actually inhibit deer movements into new areas.

For deer, the basic social unit is the maternal family group consisting of an adult doe, her fawns and, possibly, older female offspring. One way to explain deer social units is called the "rose petal hypothesis." This hypothesis states that an adult doe's home range forms the center of a rose and her female offsprings' home ranges will form petals of the rose. If deer are greatly reduced in one area, female deer will not usually leave their "flower" of home ranges to move into the vacated areas.

Recall the hunter, farmer and biologist with differing views on deer populations. Who is right? In reality, each may be right. Deer populations where the hunter spends much of his time may be lower than deer on the farmer's land. Based on data from a combination of areas similar to where the hunter and farmer are seeing deer, the biologist's assessment of a stable population also is possible. Biologists also could give different answers based upon perspective. For example, if asked what has happened to deer populations during the last 10 years," two different, but correct answers could be given. If asked about statewide deer populations, the answer would be that the population has increased from about 1,200,000 in 1990 to about 1,500,000 in 2000. But, if asked about a specific county, the answer might be that the population increased, decreased or remained the same.

The Game Commission evaluates deer populations on a broader scale than most people, yet even if hunters, farmers and others agreed to discuss deer populations at only county and state levels, confusion and controversy would remain because of uncertainty.

Uncertainty

Estimates versus "real" numbers. Given a choice, most people, including biologists, will choose to

have actual numbers. For deer harvests and populations in Pennsylvania, however, we have no choice but to use estimates, even though there's always a degree of uncertainty associated with them.

We cannot monitor the harvest of every deer hunter. Rather, we rely upon those who do get a deer to report it. And because not every hunter who gets a deer sends in a report card, we must estimate harvests based upon reporting rates (the percentage of deer that are reported). Each year at butcher shops and during field checks, Game Commission biologists, conservation officers and foresters examine more than 50,000 deer. Reporting rates are then calculated by crosschecking this data and report cards.

We also do not know exactly how many deer live in a given area, especially an area the size of Pennsylvania. Because we cannot count every deer, we estimate the population, which - like any estimate - has a degree of uncertainty.

How good are our estimates?

Although it is not possible to directly compare a deer population estimate with the actual number (the actual number is unknown), it is possible to evaluate an estimate with other estimates derived in different ways.

Deer harvests estimated from report card reporting rates, for example, can be compared to deer harvest estimates from the annual Game Take Survey. For this survey, a random sample of Pennsylvania hunters reports the number of animals harvested for numerous species. Based upon these responses, annual statewide harvest estimates are calculated. Over the last decade, deer harvest estimates based on reporting rates and those based on Game Take Survey results are very similar (Figure 1). On average, these two estimates, each based on entirely separate data, are within four percent of each other. Such similarity of independent estimates strongly suggests that deer harvests based on reporting rates are accurate.

If deer harvest estimates appear credible, how about deer population estimates? One way of evaluating deer population estimates is to compare projected antlered harvests with the estimated antlered harvests. Each spring, from harvest and field data, the Game Commission estimates huntable deer populations. Because population estimates are derived from harvest data, deer in unhuntable areas (urban/suburban areas) are not included. Based upon population estimates, a projection is made of what the antlered harvest for the upcoming fall hunting season will be.

Between 1991 and 2000, projected antlered harvests differ from harvests (calculated after the hunting seasons) by only about seven percent (Figure2). Such similarity between before and after the season harvest estimates suggests that deer population estimating technique closely reflects the true statewide deer population. Here it's important to remember perspective. Just because the statewide deer population estimate appears reasonable, this does not imply the population estimate accurately reflects changes in a deer population in a small local area, such as a state game lands or farm.

Nobody will ever be able to say exactly how many deer live in or are harvested in Pennsylvania. Our methods of estimating harvests and populations, however, appear reasonable and are based on data collected from hunters and deer.

Regardless of technological advances, estimating deer harvests and populations is likely to remain controversial. Uncertainty is an inherent part of estimating wildlife harvests and populations and cannot be avoided, but the Game Commission will continue to use the most efficient techniques available for estimating deer harvests and populations.

Beginning to See the Forest for the Trees

IMAGINE a landscape of forested mountains, clear flowing streams, a fantastic array of trees, shrubs and wildflowers, wildlife of all varieties; a place where the beauty of natural balance prevails; a place where the community, the landowners and the land users work together to facilitate this balance; a place where local ingenuity, a strong connection to the land and voluntary stewardship have combined for the benefit of these people and their paradise. Sound far-fetched? Not if you hunt or live near the 74,000-acre Kinzua Quality Deer Cooperative (KQDC) in northwest McKean County, where such a landscape has been in the works since 1998.

Folks in Bradford have a history of being forward thinkers. During the oil rush of the early 19th Century, deciding to guarantee their water supply, the townfolk built the precursors to what's now the Heffner Reservoir. They valued the resource, they knew it was important and they knew it was possible to spoil it. So they set aside a share of land in the watershed and protected it, thus ensuring an ample supply of clean water for their community long into the future. Now they are protecting their forests, their livelihood and their recreational traditions.

When Native Americans occupied this part of the state, it is thought that deer densities were between 8 and 15 deer per square mile. As the area was settled, hunting pressure increased. Then, during the late 1800s and early 1900s the forests were cut, in what some described as the "highest degree of forest utilization that the world has ever seen." At first, deer were nearly wiped out, but the young, regenerating forests created ideal habitat for deer, and by the 1920s, farmers and foresters were complaining. The first doe season was held in 1923 to address what had become an overabundant herd.

Over the years, high deer density "hot spots" have plagued farmers, foresters and, as it turns out, the very habitat that supports the deer in the first place. Which brings us to the predicament we're in today - a forest incapable of supporting the number of deer it once did, because they've, very simply, eaten themselves out of house and home.

Enter the KQDC - a group of private and public landowners, hunters, local businessmen, scientists and government personnel who've come together to improve the quality of both the habitat and the hunting in this region. They've joined forces as the result of a common cause - issues with the deer herd. The landowners, in this case owners of large tracts of land managed for forest products, are unable to regenerate a diverse forest without the use of expensive fences, herbicides and fertilizers to combat the impacts of overbrowsing by deer. The hunters (locals and others from as far away as Pittsburgh, Erie, Ohio and New York) want larger, healthier deer with large antlers; they want to see them, and they want access to them. The local businessmen want to keep sportsmen coming to the area, for vacations, scouting trips and hunting excursions. Scientists and government personnel want a healthy forest in balance with a healthy deer herd. Seven years ago, this unconventional assembly was brought together by the Sand County Foundation to try a new, concerted approach to improving the quality of both the habitat and the herd - and it's working.

There are currently five landowners in the KQDC partnership: Allegheny National Forest, Bradford Water Authority (BWA), Collins Pine Company, RAM Forest Products and Forest Investment Associates. Their objectives are to produce high-value sawtimber, protect water quality, provide wildlife habitat, enhance biodiversity, maintain sustainable forest productivity, and reduce the costs of forest regeneration. (Deer deterrents can cost up to $800 per acre, for timber that may not be harvested for 80 years.) The landowners know they can't meet their objectives without managing deer, so they've actively sought the cooperation of the hunting community and opened their combined acreage to public hunting. The idea is that healthy deer exist in healthy habitat and, therefore, a partnership between hunters and habitat managers is required. The land managers depend on hunters to keep deer densities at levels appropriate for the habitat, and the hunters depend on land managers to provide quality habitat for deer.

The KQDC landowners continue to involve and engage the community. Each year volunteers monitor

the deer herd through pellet count surveys, roadside daylight counts and harvest check stations. Many of the volunteers are hunters or employees of the KQDC landowners.

Every winter the KQDC hosts an appreciation banquet and raffle for sportsmen who hunted the KQDC and brought their deer to one of the KQDC check stations. Every two years, researchers supervised by the U.S. Forest Service Forestry Sciences Laboratory conduct a detailed analysis of 142 vegetation plots to assess forest health. Public meetings and hands-on educational seminars such as Deer Density and Carrying Capacity workshops are held regularly and an educational demonstration area is currently being planned.

All of these efforts are designed to engage the hunters and the community in the quest for better habitat, better hunting and a better deer herd.

With the data they've gathered, the KQDC leadership team is starting to see trends in the herd and the habitat. For instance, they estimate that over winter, the average deer density in 2005 was 14 deer per square mile, down from 24 in 2004 and 28 in 2003. Their goal is an average of 15 to 18, which they believe is appropriate to sustain diverse mixed forests. Densities do, however, vary with habitat and topography and some areas have reached desired density levels.

Since the 3-point regulations took effect, most bucks harvested are in the 2½-year age class rather than yearlings, as was the case in the past. Buck body weights have increased slightly from 115 to 119 pounds, but are still short of the KQDC goal of 140 to 150 pounds. Antler spread, number of points and beam diameter also increased with the 3-point rule. Impact on the forest from deer browsing was less in 2004 than the previous two years and a detectable improvement of habitat conditions is anticipated for 2005.

I was lucky enough to spend a day in this beautiful part of the state with some of the KQDC leadership team. I saw first-hand the effects of overbrowsing, the methods used to confront it, and the excitement in these land managers' faces when they saw increasing diversity and regeneration outside the deer exclosure fences.

In the morning I met with some of the key players in forming this partnership. Dave deCalesta is a retired Forest Service scientist who currently works as a consulting wildlife biologist; he analyses and manages the KQDC deer data. Scott Reitz is a wildlife biologist with the U.S. Forest Service and coordinates KQDC activities with the Allegheny National Forest. Tim Pierson is an Extension Educator and Forester with Penn State Cooperative Extension and was the Coodinator of the KQDC for its first five years. Susan Stout works for the U.S. Forest Service Foresty Sciences Laboratory. Game Commission WCO Rose Luciane and LMO John Dzemyan have been involved since the early stages of the cooperative and serve as liaison between the KQDC and the PGC.

Later, in the field, we met up with Ken Kane, a forestry consultant for Bradford Water Authority, and Blaine Puller, the Forest Manager for Collins Pine Company.

I was absolutely impressed with the vast amount of knowledge, skill and scientific background in the group, but mostly I was moved by how their collective passion for natural resources brought them together in a collaboration so enthusiastic about involving and engaging hunters and the community in their management efforts.

As our caravan ventured onto the dusty back roads of the KQDC, Susan Stout explained that landowners wooing hunters, trying to encourage them to hunt on their properties, is a relatively new phenomenon. Engaging hunters as a management tool is the result of a new land management approach called adaptive management in which managers make predictions, implement management strategies based on those predictions, monitor the response to those strategies, and revise their predictions accordingly in an ongoing process.

BWA has been using adaptive management since before it was even a term. The 11,800-acre parcel that is part of the KQDC was closed to hunting until 1988, when it opened to foot access only. The

land managers predicted that hunters could help them control the impacts of browsing deer and subsequently opened the land to public hunting.

In the early '90s, the property was severely overbrowsed, with up to 60 deer per square mile, and lowering the herd was critical to BWA's land management. So, the authority opened its gates to vehicles during hunting season, and in 1992, when three feet of snow fell the night before opening day, plowed its roads so hunters could get in.

BWA is still adapting its management strategies. In recent years it created color-coded maps to help keep hunters from getting lost in the maze of roads created by timber practices and gas and oil development. They also direct hunters to the "hot spots" by noting high deer density areas on the maps.

"We're just elated," Ken Kane explained. "We're beginning to see more diversity and regeneration outside the fences in areas where there is good hunter access."

Farther down the road, in a recent regeneration cut, Stout pointed out red maple seedlings, then an Indian cucumber plant and lots of little Indian cucumbers spreading out along the ground. There were also trilliums dotting the forest floor. Seeing these favored deer foods growing "outside the fence" lit up Stout's face. LMO Dzemyan tugged carefully at an Indian cucumber to extract the whole root and invited me to taste it. What a treat: It really does taste like cucumber.

Stout told me that hunters would benefit by gaining insight into the intricacies of forest management. For instance, sometimes foresters have to use herbicides to eliminate plants that interfere with the growth of desirable tree seedlings, then follow up with a light thinning to stimulate the germination of seedlings in the area now cleared of interfering plants. If successful, this practice will improve local hunting because deer browse will be plentiful. As the stand ages, the growing trees will begin to shade out deer food in the understory and hunters will want to move on to other areas where management practices have created lots of browse.

The KQDC hopes to be more effective in gaining diversity with adaptive management than with deer-proof fencing. On an area of Allegheny National Forest, Stout quickly identified six species of tree seedlings growing within 10 feet of one another, outside the fence, and said other species were growing there too. She was amazed at this diversity, which she hasn't seen in years.

As we drove to another location, Puller said, "We're seeing hemlocks outside the fence for the first time since bonus tags in the early '90s."

Reitz added, "I'm starting to see things in the forest I didn't think I'd see for a long time. The health, vigor and abundance of species is improving."

The efforts of the cooperative are making a difference. Habitat is recovering and a healthy deer herd in balance with its environment is on the way. In fact, the KQDC dramatically reduced the number of DMAP coupons it requested this year, working to focus hunting on a few specific areas that continue to have too many deer.

The KQDC continues to reach out to sportsmen for their cooperation, assistance and support. They taught me a new term - QHE, *quality hunting ecology* - it means that hunters are aware of the ecological relationship between the herd and the habitat and that they understand that they, as hunters, are also land managers. It reminded me that the key to the continued recovery of this forest and its deer herd is the continued cooperation of these landowners, the local community and the sportsmen who hunt this paradise.

Seven years ago, this unconventional assembly of dedicated conservationists embarked on a mission to improve the quality of the habitat, the hunting and the herd. Today, the Kinzua Quality Deer Cooperative is a model for other communities to emulate; their mission is noble, and it's working.

- Lori D. Richardson, PGC Education Specialist

Atlantic Flyway Wing Bee

THIS PAST January I spent six days at the U.S. Fish and Wildlife Service's annual Atlantic Flyway Wing Bee at the Patuxent Wildlife Research Refuge in Laurel, Maryland. Annual wing bees have been held in each of the four U.S. migratory waterfowl flyways since 1961. Although the wing bee's name may indicate that it is a contest, it is far from it. The purpose of the wing bee is to identify, sex and age ducks and geese via wings and tail feathers submitted by hunters. The USFWS uses the information to produce annual waterfowl harvest reports. Pennsylvania is within the Atlantic Flyway, and each year Atlantic Flyway waterfowlers submit approximately 20,000 wings and tail feathers to be identified, sexed and aged. The cooperation of waterfowl hunters is vital to the process of accurately estimating the waterfowl harvest.

Those who hunt migratory game birds in Pennsylvania must purchase a migratory game bird license each year, and in doing so, they register in the federal Harvest Information Program (HIP). Through HIP, hunters provide information that helps biologists manage our migratory game bird populations. The program is based on a survey of randomly selected migratory bird hunters. When hunters purchase their migratory game bird license, they are asked to voluntarily answer several questions about their hunting experience the year prior. The answers to these questions are used to help the USFWS mail different types of surveys to the appropriate type of hunters. For instance, if someone harvested many doves but no waterfowl, they'd be more likely to receive a survey regarding dove harvest than waterfowl harvest. The survey data is later used to develop harvest estimates for migratory game bird species.

Some hunters are also asked to submit one wing from each duck and the primary and tail feathers of each goose they harvest. Hunters send these parts, along with the state, county, town and date of harvest, as well as band number (if applicable) to the USFWS. It is vital that hunters supply accurate information about the parts they submit in order to produce reliable harvest reports. As waterfowl seasons open and parts and information start to arrive, USFWS personnel separate the parts by species only.

The next stage in the process is the wing bees. Each of the four U.S. migratory waterfowl flyways has a wing bee. The USFWS requests that each state in each flyway send a representative knowledgeable about waterfowl to assist in identifying, sexing and aging the submitted wings and tail feathers. Biologists and aides from the USFWS oversee the process. At each wing bee, approximately 30 personnel examine wings and tail feathers from puddle ducks, diving ducks, sea ducks, geese and other migratory waterfowl. Some waterfowl species can be accurately sexed and aged only by measuring a portion of the wing, while other species require only an examination of individual feathers. The staff also checks harvest information for each submitted part. This data collection process takes several hundred man-hours.

The information and waterfowl parts supplied by hunters are vital to an accurate year?end harvest report. The wing bee supplies a breakdown of data about each individual harvest, by location, species, sex and age. This information, along with hunter surveys and HIP data, make up the information found in the year?end waterfowl harvest report. The USFWS sends waterfowl hunters who participated in the parts collection process a report about each of the parts they submitted, including the species, sex and age of the birds they harvested. The wing bee is just another impressive example of hunters and wildlife management agencies working together to help manage and conserve wildlife today and into the future.

- Chad R. Eyler, York County WCO

A Roadhunting Date

BOREDOM was setting in. I was sitting in my vehicle, late in the afternoon of the last Saturday of deer season, watching for road-hunters and wondering what my patrol plan would be at sunset and beyond. Deputies George Hinkle and Linda McCafferty were nearby in another vehicle, doing the same thing. Also in the area was Philadelphia WCO Jerrold Czech with my other deputy, Bill Cosenza.

About 3:30 a region office dispatcher called, informing me that a person had just reported finding a dead deer near his house soon after hearing a gunshot from the road. It was close by, and even closer to George and Linda, so I dispatched them to the scene. Arriving within five minutes or so, George spoke with the caller who showed him the deer - a young buck that had just been killed with a wound in the neck, only about 20 yards from the road and surrounded by several scattered houses in the wooded countryside in Chadds Ford Township, Delaware County.

George sent Linda to hide near the dead deer, while he tucked his vehicle on an adjacent lane to wait. Meanwhile, I received a call about another possible violation, so I left the area, while Jerry and Bill stayed nearby as backup.

Within minutes the officers noticed a small white car slowly drive by, then back and forth twice. A short time later, with darkness rapidly approaching, the white car returned again. This time it pulled into a lane on the opposite side of the main road where George was perched and stopped. A man quickly got out of the passenger side and headed into the woods directly toward the deer. He walked within several feet of Linda, who remained quiet and still, and when he got to the deer, he tied a rope around its neck. As headlights from passing cars swept down the road, the suspect stopped and hid until they passed. Seemingly satisfied that he was unobserved, he quickly got the deer back out to the car and dumped it into the trunk.

As the vehicle then began to head down the road, George pulled out from behind and stopped it. As this was unfolding, I was heading back to the scene and was able to help with the vehicle stop from the front. Jerry and Bill also converged on the scene.

It turns out the man who got the deer had hunting attire, an unloaded shotgun and ammunition in the backseat. His girlfriend was driving. The buck was untagged, but both claimed they thought it was a deer that had been struck by a vehicle and they were just "picking it up for the meat." We seized the deer and collected a 12-gauge 00 buckshot round from the car. The two suspects stood firm in their story that they did not shoot the deer. With all our evidence gathered, we allowed the suspects to leave. A later examination of the carcass showed that a single small projectile had gone entirely through the neck.

After considering everything we had, I believed we had a good case for filing a charge of possessing an unlawfully taken deer, being that it was obviously shot from the road, within multiple safety zones and was moved without being tagged. We also had the one witness who heard the shot and could attest that it originated from the vicinity of the road. But still, I was not satisfied.

A couple days later Deputy Rich Simpson and I returned to the scene. After searching through the woods where the carcass had been, Rich found a little hole in a tree. From the color and texture of the wood, the hole was fresh and just behind the location of the deer from the direction of the road. From it, we pulled out a small copper-coated sphere, which I thought was a 12-gauge 00 buckshot pellet.

Later, I knocked on the door of another house close to the scene. A woman answered, and after inviting me in, she recalled hearing a shot during the general time the incident had occurred and identified the origin as being toward the road. She also said that she quickly looked out the window and got a glimpse of a small light-colored car that immediately pulled away.

Soon after, we gave the two suspects another opportunity to be honest with us, but they still stuck

to their story. At this point I thought I had enough evidence for more than just the possession charge. I was fairly certain I could prove beyond a reasonable doubt that they were the ones responsible for the actual shooting. But, in order to finalize everything, I sent the seized shotgun shell, along with the projectile from the tree to the Pennsylvania State Police crime laboratory for a more formal forensic comparison.

After several months, the lab results came in. It was determined that the object found in the tree was, indeed, a 00 buckshot pellet, the same type of copper-coated projectile found in the defendant's shotgun shell. With this last piece of evidence, I filed charges on the couple, each with possession of a deer unlawfully taken and hunting through the use of a motor vehicle. Additionally, I charged the man with shooting in a safety zone.

A court date was then set, because the defendants pled not guilty. I had asked both of the witnesses if they would be willing to testify. They agreed, which surprised me, because from my experience many witnesses often ultimately don't want to "get involved." During the trial the two witnesses, several deputies and I all testified, which I thought was a marvelous display of concerned citizens and law enforcement working together for the benefit of wildlife conservation and public safety. The defendants repeated their tale of merely trying to pick up a roadkill. Because this was mostly a circumstantial case, I felt that every bit of testimony and physical evidence was critical. But all together, I believed, it painted an obvious picture of what the two had really been up to that afternoon. The judge seemed to agree, and found them both guilty on all charges. Afterwards, I thought what a strange way for a couple to spend a Saturday - on a roadhunting date.

- D. J. David, Adams County WCO
(Was serving in Delaware County when this incident occurred)

Just Add Bats

IT'S DARK AND COLD and I've been standing on the side of a mountain all night. About a dozen of us are huddled here, in the early morning, many somewhat befuddled from lack of sleep and not eating well for several days. In the background I hear the fluttering of hundreds of small flying mammals accompaning us. Headlamps are the only light, save the stars and moon, and only when necessary to identify the critters at hand.

We're not far from Altoona, in Canoe Creek State Park, and at the entrance of the Hartman Limestone Mine, one of the state's largest bat hibernacula. In the early 1900s Mr. Hartman conducted a mining operation here that closed during the Great Depression. The old mine's location and character make it an ideal hibernaculum for more than 22,000 bats representing six species and including about 600 of the federally endangered Indiana bats.

Inside the mine, tunnels finger out at varying levels, creating a temperature gradient - the deeper you go, the cooler it gets. There are many pits and domes where the tunnels and natural cave features meet to form microclimates. The partly closed entrances restrict human disturbance and trap cool air inside the mine, creating cool and stable temperatures in the lower levels. The microclimates and distinct temperature gradient enable bats to find optimal temperatures throughout the mine all winter long.

The mine is also within a mile's flight of many feeding areas where the bats find a steady summer food supply. A retired church, two miles away, now managed by Canoe Creek State Park, is the second-largest maternity roost for little brown bats, several I-bats have been found roosting there also.

We are here to trap the exodus. The bats are awakening and leaving their winter roost, traveling through the maze of tunnels toward one of the three exits from the mine. Two of the exits this night are set with harp traps - a plastic tarp with a large rectangular opening near the center, draped over the mine exit. The plastic directs exiting bats into two rows of fishing lines hung vertically and spaced about two inches apart. As bats come through the gate, their echolocation detects the first row of lines. They pull their wings in to pass between two filaments, and then open their wings, hitting the second row and sliding down the lines into a catch tarp at the bottom of the trap. Every hour, we check the traps and gather the bats into a small metal-mesh and plywood cage just over a foot square. From there we head down to the tailgate that serves as a central meeting location and a flurry of identifying begins.

"Female little brown," says one volunteer.

Another, "Two females."

Still another, "Male non-reproductive."

The volunteers and biologists pull bats from the cage one or two at a time. Each bat is passed through an electronic scanner that checks for a pit-tag (like a bar code placed under the skin as part of a band-retention study). They are then identified by species, sex and reproductive status before being set free.

The great majority of bats this night (several hundred) are female little browns. We're hoping to catch six female Indiana bats for a telemetry study, to learn where these animals go to forage, roost and raise their young during the summer. When an Indiana bat is identified, the biologists first check for an ID-band indicating that the bat has been caught previously. If it doesn't have a band, one is attached.

The first I-bat we catch is a female with no ID tag. She's now known as 386PGC by the yellow plastic band on her left wing. The length of her ears, tragus (part of the ear), forearm and foot are measured. Also noted are the entrance where she was captured and the time of capture, in this case

the third entrance and second capture. She's weighed by placing her in an upside down pill vile on a small digital scale where she registers a healthy 6.4 grams (less than the combined weight of a dollar bill and a quarter). Then we set her aside in a quiet spot and continue trapping.

The transmitters these I-bats will don are .41 grams (less than a paperclip) and about a third the size of a dime. The battery life should allow biologists to track them for about 21 days - but bat tracking is tricky business. To do this, it will take several vehicles on the ground and an airplane. The plane is outfitted with two antennas (one on each wing) and a sound filter, switchbox, headphones, real-time GPS feeding into digital maps on a laptop recording the trip, and ground communications equipment. All this, the pilot and PGC biologists Cal Butchkoski and Patti Barber squeeze into the small cockpit for hours of intense listening and tracking both day and night.

The ground crew, in several vehicles, are set up much the same, including a directional antenna, a laptop with real-time GPS, digital maps and a 2-way radio. In some vehicles there may also be a passenger to help, allowing the driver to concentrate on driving very quickly through unfamiliar territory in pursuit of a bat that can travel up to 30 mph and doesn't have to follow roads or traffic laws. As you might imagine, the ground crews have some pretty intense and exciting experiences, as do any locals who happen to cross their path in the wee hours of the morning.

Here is a quote from the daily email updates provided by Butchkoski regarding the first hours of the pursuit:

"We finally managed to tag six female Indiana bats Sunday night (4/17). In the air we managed to keep track of five of them until one took off heading east taking the ground crew with it. In one night that bat jumped Lock Mt, Tussey Mt, the Raystown Lake, Sideling Hill, Jacks Mountain, the Kittatinny ridges, crossed I-81 and finally went to roost atop South Mountain overlooking and north of Caledonia State Park! That's a straight-line run of 60 miles.

"The priority will be to stay with the bat that's traveling the fastest in hopes that it will get to the final destination without any long layovers before the batteries fail. Plan to be in the air again tonight . . . "

That lead bat finally came to roost 92 miles from the Hartman mine, just over the Maryland border, in a hickory tree with about 20 other bats. Biologists believe this to be her choice for a maternity roost. A second bat also ended her spring migration in another Maryland hickory with more than 60 other bats about 84 miles from the mine. The PGC coordinated with the MDNR to continue monitoring until the transmitter batteries died. Other bats were lost in the flight-restricted areas of Camp David, Aberdeen Proving Grounds, and the Philadelphia, Baltimore and DC airports.

This year's telemetry project is the first time Pennsylvania has monitored the species to find summer maternity colonies and the first time wildlife agencies in New York, Pennsylvania and Maryland have coordinated efforts to study bats that migrate in this region. PennDOT and the U.S. Fish & Wildlife Service helped fund the project.

- Lori D. Richardson, Education Specialist

Bear Season

IF I WERE TO ASK hunters when bear season opens, most - if not all - would say the Monday before Thanksgiving. Their answer would be correct. If you were to ask the same question to WCOs in bear country, you might be surprised by the responses. It would vary from WCO to WCO, depending on district. My answer would be early March. And I think it's safe to say that for a growing number of WCOs, "Bear season" begins when bears come out of hibernation in the early spring.

I've lived and worked in eastern McKean County since graduating from the training school in 1996. The people here are friendly and very independent. Most have lived here all of their lives and are used to wildlife and problems associated with living in the "big woods." In the last 10 years or so, however, the number of bear sightings and nuisance calls have risen dramatically. The harvest data supports this. In 1975, 16 bears were harvested in McKean County. In 1985, 26; and by 1995 there were 102. In 2004 there were 114. A record 154 bears were taken in 2000. I haven't recorded the number of nuisance calls I've received, but I know they've risen every year since I've been here.

Further, for some people the mere sighting of a bear is a concern, while others tolerate bears as part of life here. The two most common calls involve birdfeeders and trash. I tell people that bears think with their stomachs, especially in the spring, when natural foods are not as abundant. Often people place their trash out the night before pickup only to find the next morning that it has been scattered by a bear. Placing the trash out in the morning of pickup normally solves that problem.

Birdfeeders by far are the most controversial cause of nuisance bear problems. Whether they know it or not, people who feed birds feed all wildlife. Birds are sloppy eaters and seed litters the ground beneath feeders, which attracts other wildlife. The problem is that when a bear visits a birdfeeder, it has the tendency to destroy it. Birds have lived for millions of years without people feeding them, but if you must feed birds, simply place a handful of seed out on a platform or on the ground. Place enough for the birds to eat in one day, leaving nothing for bears to eat at night, and do not place suet out when bears are active. Taking in feeders at night reduces the chances that bears will find them.

The 2004 "bear season" for me began in January, when I received several calls about a bear in a tree about 100 yards from a roadway. When I arrived, I noticed the bear in the tree, apparently sleeping, snow piling up on its back. The tree was near an old orchard, and I could see that it had been coming down out of the tree and feeding on apples. I told the one caller that there was nothing unusual about a bear hibernating in a tree, and I explained that when the apples were gone the bear would be, too. I told him that the best thing he could do for the bear was to leave it alone.

The bear stayed in that tree for several weeks, and I received a lot of calls about it. One woman was in tears when she called demanding that I capture it and hold it in a warm place until spring. I checked on the bear regularly, to ensure that no one was bothering it, and when the apples were gone the bear left.

Throughout the late winter and early spring of 2004 I received a lot of calls about bears getting into birdfeeders or garbage. In late April, Deputy Dale Thielges reported that several camps had been broken into by a bear. Due to rough road conditions, it was several weeks before I could check the camps. When I finally got there I could see that the camps (old travel trailers) had indeed been broken into. The bear had just reached under the doors and bent them up. I was told that nine trailers had been broken into. I inspected four, and every one had some sort of food or garbage in it. Several had large piles of trash stored inside, and most had not been used for several months, so it was apparent that the food or trash had been there a while. I located one camp nearby whose owners had been placing corn and other foodstuffs for bears and placed my culvert trap near the food. Within days I captured a 461-pound male and another weighing 220. Several people whose camps had been broken into demanded that the bears be killed. I informed them that no bears would be killed, and that the camp owners who stored food and trash were partly to blame.

Throughout May and early June a steady stream of bear incidents came to my attention. On June 8 a 140-pound male that had been raiding feeders was captured near Port Allegany. I told the people to take in the feeders and relocated the bear. Deputy Gordon Liezert then informed me of an area in Potter County where bears were causing problems. Potter County WCO Mark Fair was on vacation, so Gordon and I went to investigate. We borrowed a trap from WCO Len Groshek and set it on June 10. Over the next week nine bears -with several weighing more than 400 pounds - were trapped and relocated. And by the end of summer, WCO Fair had captured several more from the area.

Every time I receive a bear call I visit the person who made it. This way I can assure the person that the bear is not a threat, and I can point out what he or she can do to minimize the chances of the bear returning. Oftentimes, I have to tell the person that they need to clean up and properly dispose of their garbage, that they're creating a problem not just for themselves, but for the entire neighborhood.

Late July found me preparing for two weeks of vacation. In nearly 20 years of service I had never taken two weeks off, and I really needed it; I put a new roof on my house. Even as I worked on the roof, though, people came over to tell me about nuisance bears. Deputy Liezert and I set traps in various places to try and help. Gordon placed the trap near the Superette in Duke Center and the owners reported that a bear had been caught during the evening. The next morning Gordon and I went to process it, only to find that someone had released it the night before. We could see human footprints on the top of the trap next to the door. Despite this, we reset the trap and several days later captured a 400-pound male. A crowd of about 40 people showed up, so while processing the bear we educated the crowd on how to live with bears. I logged 30 hours on nuisance bear calls during my vacation, and we captured five bears, and, surprisingly, I completed my roofing project.

In mid-August oats planted by local farmers ripened, and the bears hit them hard. I captured several bears in oat fields and two more in blueberry patches. Two more were caught near residences and another two were caught in local cornfields. With fewer farms still operating, I try to help these farmers as much as I can. Despite this, farmers sometimes suffer more damage by bears then they can tolerate. On September 12 I received a call from a local dairy farmer reporting that he had shot a large bear damaging his corn crop. Farmers have the right to kill wildlife damaging their crops, but they must report it. Deputy Dale Thielges and I went to the farm and met with the farmer.

We learned that the bear had not been killed outright, and we discovered a blood trail leading into the corn. Dale and I loaded our shotguns with 00 buckshot and followed the trail. Let me tell you, tracking a wounded bear through a corn field is pretty unnerving. I had to get on my hands and knees to look down the rows, and even then couldn't see very far. After about 30 minutes I heard several shots coming from Dale's direction, and then heard him say he got bear. The bear was circling him when he shot it at 15 feet. It weighed 461 pounds. When tracking the bear through the corn I noted large areas where bears had devastated the crop. The bear had tags in his ears, and I learned that he had been trapped previously in Potter County.

I thought that my hectic day was over, but around 6 p.m. I got a call from the same farmer telling me that he had just shot a bigger bear in the same field, this time the bear was dead. I arrived and was surprised to find the second bear weighed around 650 pounds, and it was less than 100 yards from where the first had been shot. Another bear weighing around 200 pounds was shot the following day in the same field. Later the same day a 130-pound bear was hit and killed on Route 155, about a mile from where the others had been shot. The farmer told me that he lost at least one month's feed for his dairy herd from bear damage. He also told me that he saw a female with three cubs in the field, but he did not wish to shoot them. For me, shortly after that week I visited my local chiropractor.

I continued to respond to bear calls right through bear season. We also handled five bears that had been killed by vehicles. In all, in my district more than 25 bears were captured and relocated, at least 12 were killed and 40 or more were legally harvested during bear season. Despite these numbers, deer hunters reported bear sightings all over my district, and one local hunter told me he saw eight different bears during deer season.

My bear trap had been in continual use from early March until November 15th. The trap was visited daily, including weekends and days off. I'm not alone in the effort to help the public with bear conflicts, as my deputies put in many hours. My neighboring officers help whenever called upon, and I certainly appreciate it. I enjoy working with bears and take every opportunity to educate the public on how to live with and enjoy them. Bear hunters should definitely consider McKean and Potter counties. There are some great opportunities here in the "big woods" and the people and businesses will welcome you with a great big bear hug.

- Thomas M. Sabolcik, McKean County WCO

The Jacklighters

IN 1895, when the Game Commission was established, one of the first orders of business was to ban jacklighting and other tools and techniques used to take large numbers of game. Unfortunately, jacklighting, so named because the settlers who first engaged in the activity did so by using a torch made from the pitch of the jack pine tree, is still common today. And with automobiles, powerful spotlights and scoped high-powered rifles, it's become easier. Nearly every WCO must deal with jacklighters, and here's one case I became involved in that took us for quite a ride.

1998 was busier than usual, because I was assigned to cover northern Dauphin County along with my western Schuylkill County district. As the year went on, we began to receive quite a few calls about night shooting in one particular area.

"Keystone Boulevard" was the name given to a newly constructed road in western Schuylkill County. It runs parallel to Interstate 81 and was built to accommodate the truck traffic at a warehouse complex being built on Broad Mountain. Prior to development, the area was rugged mountain ground where deer, bear and other wildlife had long been accustomed to little or no human pressure. After the new road had been constructed, a wide berm was seeded with grass, and these long strips of new, nutrient rich vegetation quickly became deer magnets. Perfect for jacklighting.

In November and December Broad Mountain is cold and windy, and it was there, in the cold and darkness, we waited. On some nights the wind blew so hard that our trucks would actually rock back and forth. Although the cold penetrated our vehicles, we waited with windows partway down, to more likely hear any shots. The deputies and I shared many nights there, but by the middle of December, we had to move on, wondering if our luck would ever change. Then, finally, late one night it did.

"I said, 'the shooter's still there'."

I had asked dispatcher Ed Shutter to repeat, because I was still half asleep. It was just after midnight on Sunday morning. Buck season had just ended, and I went to sleep that night, delighted in knowing I had a day off before the antlerless season began. Now, clutching the phone and listening intently, I realized my plans for a quiet day at home were quickly evaporating.

Ed had received a call from the Schuylkill County communications center. A worker at one of the new warehouses had reported seeing a small truck driving slowly down Keystone Boulevard, with one of the two occupants working a spotlight. As he watched, the light illuminated a deer grazing near the roadway. Within seconds, the rifle blast broke the silence. Stunned, the witness watched both men exit the vehicle and quickly load the deer onto the truck. He hurried to a nearby telephone to call 911, to notify the "game wardens." Now, Ed was telling me that the truck was still in the area.

The county dispatcher had also notified the state police, and according to Ed, a unit was on its way. I immediately called Deputy Jeff Rinaldo to assist, and after donning my uniform I began the nearly 20-mile drive to Keystone Boulevard.

Troopers who had been patrolling nearby arrived before we did. When I got there I found a handcuffed, middle-age man standing behind a small pickup. He had obviously been drinking.

Deputy Rinaldo found fresh blood in the truck bed, and inside was an unloaded .222/20-gauge. Live .222 rounds and three casings were on the floor; a spotlight was on the seat, still plugged in; and smudges of blood were on the restrained man's trousers. As I collected evidence, Rinaldo, with the witness's help, found where the deer had been shot and dragged to the road. This appeared to be a simple case, but from the beginning we had problems.

Our witness didn't have a clear description of the vehicle and was unable to identify the truck of the person in custody as the one used in the crime. Furthermore, the vehicle was traveling in the opposite direction from where the suspect's truck was now parked. And where was the second

person?

The man in custody, "Will," insisted that he knew nothing about a deer being poached. He said he stopped along this isolated roadway to answer a call of nature. As for the fresh blood on his trousers and in his truck, he claimed it came from a deer that had been lawfully killed by an unknown hunter earlier that day, and he, being such a nice guy, helped the hunter transport it.

Will failed a sobriety test, so the troopers took him to the Frackville barracks for booking. I seized the firearm and spotlight and had his pickup impounded before traveling to the barracks to interview him more thoroughly. Once again, he denied any knowledge of a deer. I took a sample of blood from his trousers and explained that I would have the DNA from this sample and from the blood on his truck compared to the blood from where the deer had been killed. He now abruptly remembered that there had been a deer poached, but his involvement was, of course, minimal.

Will, he explained, was in a nearby tavern, drinking with some guy, when this fellow asked Will to help him. Not knowing the man or what he wanted help with, Will agreed to assist, anyway. He said his new friend asked him to follow him to Keystone Boulevard. It was around midnight and Will drove behind the man's red pickup until they reached a place where both could pull over. The man then walked back and asked Will to wait until he returned. Then, according to Will, the man drove off. He returned a short time later and explained that he had just shot a deer and now needed Will to go retrieve it for him. Will drove his truck to where the deer had been killed, dragged the deer to the road and loaded it onto his truck, then delivered it to the shooter. After Will helped him load it in the red truck, the "real" poacher sped away. Will then went back to where the deer had been shot, to rest for a few minutes, and it was at that point, he said, that the State Police showed up.

That explained the blood in his truck and why his vehicle was facing the opposite direction. It also seemed to explain why the deer was nowhere to be found. As for the gun in his truck, Will said it was in the vehicle because he is a hunter. And the spotlight? He said he had been spotlighting earlier that evening, during legal hours (it's illegal to spotlight during deer season, anyway) and without the gun in the truck.

According to the evidence and his own account, Will had cooperated with another to take a deer unlawfully, a clear game law violation. When I explained the charge against him and he realized that his "just helping some other guy" story wouldn't get him off the hook, he became angry and refused to sign the citation.

I gave him his copy and turned him back over to the troopers. With his truck impounded and a $600 fine, Will was released to his brother around 3 a.m.

It bothered Deputy Rinaldo and me that we had not found the deer, or the second individual the witness had seen. But then, a few days later, we got a call from a concerned sportsman, Alex, who went on to describe Will's activities that night.

According to Alex, Will and another man Alex didn't know, poached the deer from Will's truck. After shooting it, Will and his accomplice hid the deer, planning on getting it later, then went searching for a second deer. Will's friend shot at a second deer, from the passenger side of the vehicle, and was in the woods, looking for it, when the troopers arrived. Near panic, he remained there, lying quietly and watching helplessly while Will was arrested and the vehicle was loaded onto a rollback and taken away. Only then did he leave, walking off the mountain to seek transportation back to his home, somewhere in Dauphin County.

Even more astounding is what Alex said next. After brothers Will and Johnny left the State Police barracks, they retrieved the deer, took it to a remote area in northern Dauphin County and field-dressed it before taking it to one of their homes.

I couldn't believe they would be so brazen. Alex went on to say that Johnny was currently working at a construction site in the Reading area and that his truck, the one used to pick up the deer, may be

there now.

Without delay, I drove to where Alex said the deer had been stashed prior to its retrieval. I hoped to find some blood or hair that might support Alex's claim that a freshly killed deer had been hidden there. At the same time I contacted the region office and requested Berks County officers to be sent to examine Johnny's vehicle for similar evidence.

I searched the area Alex had described, but found nothing. Next I went to where Alex said the deer had been field-dressed. On my way, I was notified that Johnny had just been questioned and refused to provide a statement. I had not planned for that. I had intended to only have his vehicle inspected. Now, he was aware of my investigation. And worse, Johnny had gotten a ride to work, so his truck wasn't even at the job site. Johnny told the officers that his truck was parked in front of his house, in Lykens.

I called Deputy Bill Honicker and asked him to continue my search for the entrails while I went to Lykens. Dauphin County deputies Barry Everly and Sean Erdman met me there, but the truck was gone. Johnny's wife explained that her brother-in-law, Will, had, moments before, borrowed Johnny's truck to "run some errands." Obviously, Will had received a call from Johnny. I asked the deputies to stay back, in case Will returned, while I hurried to the car wash in Tower City, a few miles away.

Within minutes Bill radioed to say that he had found the site Alex had described, and that there were deer entrails that appeared to be a few days old. At the car wash, I found wet tire tracks on the blacktop at the exit end of one stall, and at the back of the stall, deer hair and a small chunk of flesh. After gathering what evidence I could find, I left the car wash and Deputy Everly radioed to say that he and the other officers had found Johnny's truck parked in the neighboring town of Wiconisco.

When I arrived, Johnny was standing on the sidewalk. "What's the problem?" he asked, trying to come across as a law-abiding citizen. His performance was poor. Without responding, I walked over and looked in the bed of his truck. It was almost spotless. Almost.

I found a single deer hair clinging to the inside of the bed. Faced with this evidence, Johnny quickly confessed to retrieving the deer after leaving the State Police barracks. During his confession, Johnny made no mention of the other man Alex had spoken of. Then he added something that peaked my interest. "We went back in there only so Will could show me where the deer was shot," he said.

Now, Johnny no doubt thought I already knew they had returned to where the deer had been shot that night, or he never would have divulged this information. As incredible as it was that the brothers would even go back to retrieve the deer, it was not at all logical for them, after 3 o'clock in the morning, to drive several more miles back Keystone Boulevard, just so Will could show Johnny where he had been caught poaching a few hours earlier. No, the more probable reason they returned was to find Will's partner.

During my interview with Johnny, Will showed up.

"The game's over," I told him. "Now we need the deer."

Will agreed to produce it, and while the deputies accompanied him to his home in Lykens, I issued a citation to Johnny for transporting and possessing an unlawfully taken deer. With Will and Johnny now charged and the deer carcass being recovered, we were not ready to close the investigation, not until we had the other poacher. Regrettably, we had no more leads until, once again, a phone call changed that. A call that actually had come in long before Will poached the deer that cold December night.

Months earlier I got a call about an unlicensed taxidermist operating in the Lykens area. I also received information that this person had killed more than one buck during archery season. I didn't have time to work the case then, but now I did.

By law, a person must pass a test and then obtain a permit to perform taxidermy in Pennsylvania, even if no fees are charged. I obtained a search warrant for the residence of " Jim." Jim wasn't pleased to see us, but he was cooperative. As I interviewed him, the other officers conducted the search, and they soon brought me several sets of antlers. I asked Jim to identify them, and he told me a man named Will had brought in three of the sets.

Then he went on, "I think you know all about Will, because you're probably the warden that got him in Schuylkill County." When I asked Jim what Will had told him, he told me that Will had related the whole story to him. Jim didn't know who Will's buddy was that night, but when pressed, he said that he had seen him driving in the area recently, in a unique looking truck.

Jim was cited for performing taxidermy without a permit and for killing more than one antlered deer during that archery season - a crime he readily admitted.

One Sunday afternoon a few weeks later, Deputy Troy Lehman called. "Hey, Steve, I think I found it." Troy had decided to cruise through Lykens, hoping to spot the vehicle Jim had described. Checking the registration number, we learned it was registered to a man from Harrisburg, "Seth Newcomer." Expecting a local address, I still had a feeling that I had heard that name before.

A quick search of my files showed that Newcomer had been charged for possessing a loaded firearm in a vehicle on the last Saturday of buck season. I dug out the citation and saw that deputies Jeff Rinaldo and Frank Yanosky had issued the citation late in the afternoon that day on Broad Mountain. From their notes I could see that the vehicle Newcomer was in at the time was the same truck Troy had just located in Lykens. Jeff and Frank had also noted on the citation that Newcomer had that day a .222/20-gauge. A check of the serial number showed it was the same as the one on the firearm I had seized from Will. Now I had to talk to Newcomer.

Initially evasive, Newcomer eventually admitted to being the man who had been with Will, and he explained that both he and Will were employed by the same company, working on the construction of Keystone Boulevard, and had noticed a lot of deer filtering into the grassy areas along the new road during the evenings.

Newcomer said he had borrowed Will's gun and went hunting on the last Saturday of buck season in Schuylkill County. He was hunting alone and had dozed off in his truck when two Game Commission officers showed up and discovered the loaded firearm in his truck. Then, a few hours later, Newcomer found Will, and after a few more hours and some drinks, Will suggested they go get a deer the easy way. With Will behind the wheel they drove up the mountain and onto the dark stretch of Keystone Boulevard. They went to the end and turned around. As a large doe fed just off the berm, Will reached for his gun, and within seconds the deer was dead and in the back of the truck. Seth said he and Will then quickly drove off and then stashed the deer near the interstate.

Then they drove back to Keystone Boulevard, with Will insisting that Newcomer shoot the next deer. (Newcomer now believed this was Will's way to ensure that he [Newcomer] would not talk later. It didn't work.) They soon located another, and as Will held the spotlight, Newcomer shot. Newcomer then left the truck and entered the woods when a police car pulled up. As the events transpired, Newcomer panicked and ran through the woods until he saw lights in the distance. It was a bar, and he went inside to ask someone to take him to Lykens.

During my interview, Newcomer told me what butcher shop Will normally takes his deer to. Deputy Bill Honicker and I subsequently traveled there. The butcher knew Will; said that he came in regularly, but that he never brought a whole deer carcass in, only the trimmings, and he always ordered bologna. An inspection of the butcher's records disclosed that Will had taken deer meat there several times during the past year.

At the conclusion of this investigation, fines were collected from Will and Johnny, Jim the taxidermist and Newcomer. Additionally, each of these men had has his hunting privileges revoked.

Interestingly, we later learned that Will and Jim had both been charged previously by other WCOs on separate illegal deer cases. Furthermore, Will has been charged since this case for purchasing a hunting license while on revocation. Guess it's a way of life for some folks. I know for certain, it sure keeps us "game wardens" busy.

- Steve Hower, Perry County WCO

Into the Mind of a Violator

IT'S 4 A.M. I yawn, stretch sluggishly, squinting at the light, and shuffle toward the mound of clothes I'd laid out the night before. Today is the third day of a Waterfowl Enforcement Training course being taken by 28 WCOs and deputies, and I'll be meeting them at the crack of dawn at Haldeman's Island, where they'll be putting their new skills to the test.

Haldeman's Island, SGL 290, is just north of Harrisburg, where the Juniata enters the Susquehanna. Previously owned by Pennsy Supply and Pennsylvania Power & Light Co., the old machinery is long gone, and where there were once gaping holes left from gravel mining there are now waterfowl management ponds of varying depths and sizes. So managed, Haldeman's Island is an excellent stopover for ducks making their way to more northern nesting grounds, and is also good nesting territory for those that choose to stay. Only 30 minutes from the Ross Leffler School of Conservation (RLSC), it is an excellent location for this particular training exercise.

The 18-hour course is designed for officers wanting to learn more about waterfowl and the enforcement of state and federal waterfowl regulations. The training, sponsored by COPA (Conservation Officers of Pennsylvania Association), will be the basis of a new, 5-day course that will replace the half-day of waterfowl enforcement training previously offered, for the next class of trainees to attend RLSC. This course will also be the foundation of a 3-day in-service training option for current WCOs and deputies.

Lt. Llyod Ingerson and Sgt. Jack Bailey from the Maryland Natural Resources Police conducted the course, and having lead more than 300 similar programs for officials in Maryland, Virginia, the U.S. Fish & Wildlife Service and now, Pennsylvania, they know what they're doing. In the field of conservation enforcement for more than 20 years each, they conduct these training sessions because they have a passion for teaching officers about waterfowl enforcement.

PGC officers Chad Eyler, Jason DeCoskey, Linda Swank, Chuck Lincoln and Bradley Krieder assisted with the instruction, as they want to help other WCOs and deputies become more proficient in this facet of wildlife law enforcement. "Most officers are very comfortable dealing with deer and turkey hunting situations" Eyler says, "but many are not as familiar with waterfowl or waterfowl hunting. This course will give them the knowledge and confidence to more effectively recognize waterfowl related violations and enforce waterfowl regulations."

Deputy WCO Bill O'Donnell of Schuylkill County was anxious to learn more about waterfowl enforcement when he signed up for the course. He said he was learning a lot about identifying illegal baiting of waterfowl. "It's a lot different than deer, bear or turkey baiting because it's often underwater, you can't see it."

About a third of the participants are Wildlife Conservation Officers, the others are deputies. They hail from all parts of the state and were told to bring hip boots or waders, binoculars, spotting scopes or any of the like, along with plenty of warm clothes.

After checking in at the RLSC, the students went to work Friday evening with a pretest and information on the natural history and identifying characteristics of puddle ducks - mallards and wood ducks, for example. Saturday they learned waterfowl regulations and the natural history and identification of diving ducks, such as scaup and redheads, before heading out to Haldeman's Island for a lesson on baiting techniques commonly used by violators. When I caught up with them on Sunday, they were practicing field ID and learning practical enforcement techniques such as how to check for bait.

Like skinning a cat, there are many ways to ID a duck. In the wild, waterfowl can be identified by their size, color patterns, wingbeats, flying patterns and behaviors. For instance: the wingspan of the tundra swan is much larger than the snowgoose's; a male ringneck duck sports a white ring on his face around the base of his bill; woodducks "whistle" when they fly; teal are small and fly quickly;

puddle ducks feed in shallow water and diving ducks feed in deep water, where they'll often submerge completely.

Ducks that have been killed can be a little trickier to ID, because hunters are required to keep only the head or one feathered, attached wing per bird, until the birds are home and processed. In this case, birds can be identified only by their head or bill or their wing feathers. The greater scaup, for instance, has more white on its primary feathers than the lesser scaup; a mallard has a white stripe in the speculum of the wing on the secondary feathers where the black duck does not; and a redhead has a short multi-colored bill where the canvasback has a large, black sloping bill. Identifying the species is important, because bag limits vary for different species of waterfowl.

One of the most interesting parts of the training is the glimpse into the minds and methods of violators. Officers learned about floating nets and sunken traps constructed to capture (ensnare) dozens of diving ducks at a time, and fish hooks on weighted lines and conibear traps on sunken poles designed to catch ducks one at a time. Students were shown how violators go about baiting, checking and collecting their "harvest," what traps violators use in different situations, the different materials used to build the devices, and the methods violators use to try and outwit enforcement officers.

Participants learned how to test shot in the field, to find out what kind it is. Lead shot is not legal, of course, but today there are ten or more types of legal nontoxic shot available for waterfowl hunting. Any type of shot that sticks to a magnet is legal, but each will react differently when a pellet is pinched in a pair of pliers. Some alloys won't show marks from the pliers while others will squish easily and split on the edges. The wads of the cartridges can also help determine the type of load. Steel shot has a heavy wad to protect the gun barrel from scoring; tungsten/iron has a 6-petal, 1-piece wad, while the soft but illegal lead shot shells have thin-walled cushioned wads.

Officers learned what to keep their eyes peeled for when approaching suspected violators. Which hand do they offer their license with and which pocket do they reach into for their shells? Is that gas can in the boat suitable for the kind of fuel the boat uses or has it been modified to hide ducks? Is that contraption in the bottom of the boat used to anchor fishing nets or slyly sink ducks beyond the bag limit? What color are the corncobs in the field being hunted? Are those ducks feeding in a natural pattern or are they making a beeline straight to a baited area?

The answers to those questions could make the difference between a cordial encounter with a legal hunter and the confirmed suspicions of an observant enforcement officer.

They learned techniques for interviewing violators into giving up evidence. "It's not what you say but how you say it," says Ingerson.

For instance, instead of saying, "I know you shot at least two birds over the limit and you've got them hidden in your decoys," try "I've been watching you and your buddies all morning. Now I need you to show me where all the ducks are."

One of Ingerson's tips - "Always let them think that you know more than you think you know. If they start leading you to evidence, and it's not where you thought it was stashed, follow them anyway, the violation may be much larger than you originally anticipated."

At the end of the day, before taking their final test, the officers had a chance to ask questions and review their notes, classroom mounts and a seemingly endless array of duck wings available for study. Sgt. Bailey gave everyone his number and encouraged the students to call him anytime they had questions. Then during the exam, his phone rang. He answered with polished authority, only to find that it was a crafty trainee in the next room looking for help on the exam.

At the end of the day, each participant received a certificate for successfully completing the course. They'd crammed five days worth of training into two and a half, and though they were going home a little tired, I believe they each have a new appreciation for waterfowl and waterfowl enforcement. I

know I do.

- Lori D. Richardson, PGC Education Specialist

25 Years in the Works

WHAT DO ospreys and otters have in common? To start with, they were two of the first wildlife species to benefit from the Game Commission's Working Together for Wildlife program. But, if you're a Working Together for Wildlife (WTFW) patch collector, you know there's more to it than that.

This year marks the 25th anniversary of WTFW. Carl Graybill, Director of the PGC's Information and Education Bureau was part of the program's initiation. He remembers, "The program was developed to give the public a way to contribute to wildlife; a way for hunters and nonhunters alike to work with the agency to help wildlife."

In 1982 the commission developed a 4-inch, circular embroidered patch featuring an osprey and the words Working Together for Wildlife - Pennsylvania Game Commission. For a $2 donation, a person could obtain the patch and some information on the osprey reintroduction project. A decal of the same size and design could be purchased for $1. The limited edition of 10,000 patches sold out in less than a year.

Ospreys
In 1979 the osprey was listed as extirpated in Pennsylvania. The reintroduction of 265 nestlings obtained from Chesapeake Bay nests between 1980 and 1996 was possible due to WTFW funds. Today more than 40 pairs have established nests in the commonwealth, and the osprey has been reclassified from endangered to threatened.

The WTFW series alternates each year between bird and mammal species. In 1983, the second patch of the series featured a river otter. This time the program expanded to include not only patches and decals, but also the first in a series of limited edition fine art prints done by renowned nature artist Ned Smith. Decals were available for several more years, until 1986's kestrel, but fine art prints continue to be released each year, complementing the new patch.

"The WTFW program is likely the foundation for all other organizations with collectible patches and is possibly the first in the country to benefit wildlife. It is the oldest and strongest collectible wildlife patch series we know of," states Graybill.

Otters
Pennsylvania otters have been protected from hunting and trapping since 1952. Restocking efforts partly funded by WTFW were conducted from the early '80s through the mid-'90s. Otters can now be found in every major river basin in the state. Trap and transfer of otters from northeastern counties to the Juniata River drainage are still taking place.

Artist Nick Rosato designed the patches until 2005, when Bob Sopchick took over. Older patches have higher values than any other collectible patch series on the secondary market, with some having values of several hundred dollars, and the whole series going for more than $1,000.

Due to their high value and collectibility, counterfeit patches have surfaced in the secondary market. Some of the fakes are very good - nearly impossible to tell from the real thing - so be sure to buy from reputable collectors and dealers. WTFW patches yet to sell out can be purchased through the agency's website and at all PGC Offices. Patches are currently available from 1999 through 2005.

The WTFW fine art prints offer years of viewing pleasure and also help wildlife. Ned Smith produced the artwork for the first three prints: River Otters, Dutch Country Bluebirds and Big Woods Bobcat. Ned passed away in 1985, and from then on, the WTFW fine art print artist has been determined through an annual competition open only to Pennsylvania artists.

Bald Eagles
In 1980 there were only three nesting pairs of eagles in the state. From 1997 to 1999 the nesting population doubled, from 20 to 43 pairs. Now, eagles are nesting in at least 26 counties, 11 new nests were found last year, creating a record 79 nesting pairs. This remarkable recovery is due in part to the reintroduction of 88 eaglets transplanted from Saskatchewan. Based on this continued recovery, bald eagles may soon be reclassified

The prints are limited to an edition of 600 (plus 50 artist's proofs and 30 conservation editions) and some have appreciated considerably. Most valuable are the Ned Smith prints, originally purchased for $125, now going for anywhere from $1,000 to $7,000. Many of the other prints have sold out, too. Stephen Leed's Winter Birds in 1994, sold out in less than three months.

Other WTFW incentives designed to encourage more people to help wildlife include Plantings for Wildlife, Wildlife Seed Mix and bluebird box kits. For roughly 20 years, Plantings for Wildlife offered bundles of five

from endangered to threatened.

tree and shrub species good for food and cover for wildlife. A Wildlife Seed Mix for creating food plots was sold until 2004, and bluebird box kits continue to be sold annually.

Fishers
Once widely distributed in Pennsylvania forests, fishers were virtually extirpated from the state by unregulated trapping and timber cutting in the 1800s. From 1994 through 1998, fishers from New York and New Hampshire were reintroduced to the state's northern forests. Since 2000, annual sightings have been increasing and fishers have been reported in all but 25 counties.

Now, to satisfy the patch connoisseurs out there and bring us to the 25-year anniversary, I must mention flying squirrels and cardinals. In 1980 the Game Commission created a patch featuring a flying squirrel and the words WE NEED WILDLIFE. A $5 contribution got you the patch, a decal of the same size and design, and some information on the need for nongame wildlife contributions, all in a special 3-pocket folder.

Though the flying squirrel arrived two years before the first patch displaying the words Working Together for Wildlife, some collectors view it as the "first" patch in the series and, indeed, the flying squirrel was the public's first opportunity to contribute this way in support of wildlife.

In the '90s, two patches featuring the words WE NEED WILDLIFE replaced the flying squirrel: a male cardinal and, several years later, a female cardinal. The words Pennsylvania Game Commission were not included on the original male cardinal patch but were later added. As a "heads-up" to dedicated collectors, a male and female pileated woodpecker are "in the wings" to succeed the cardinals.

Peregrines
Prior to reintroduction efforts starting in 1982, funded in part by WTFW, there were no nesting peregrines in the state. Today, a dozen pairs are nesting here. The goal is to restore peregrine populations at suitable historic cliff nesting sites along major rivers and enhance nesting success on buildings and bridges. Last year, the first cliff-nesting site since the 1960s was found near Williamsport. Beginning in 2002, a satellite telemetry project has enabled the public to follow wandering falcons fledged from nests in both Harrisburg and Pittsburgh through journals and maps on the agency's website.

So, what else do ospreys and otters have in common? Now you know. The 1982 osprey patch and the 1983 otter patch are two of the first patches in the WTFW collectible series; they are the two most valuable and most sought after patches among collectors and may bring as much as $500 on the secondary market.

Since its inception, WTFW has generated more than $3 million to benefit wildlife, and the program continues to sell more than 20,000 patches and several hundred prints each year.

To quote from the original flyer accompanying the osprey patch, "under today's funding pressures, it's unrealistic to expect hunters alone to provide completely for all wildlife needs. Constantly growing demands on our environment and natural resources, encroaching suburbs, shopping centers and highways, modern agricultural practices and many other conflicting land uses destroy more and more productive wildlife habitat every day." Graybill reminds us that, "wildlife needs the support of everyone."

The PGC would like to express a sincere thank you to WTFW contributors. We welcome your continued support and hope you take advantage of the opportunity to purchase the special, limited-issue, 6-inch embroidered patch to commemorate the 25th anniversary of the program. We look forward to Working Together for Wildlife with you for years to come.

- Lori D. Richardson, Education Specialist

Cinnamon Bear at Crooked Pines

THE THIRD DAY of the '03 bear season found me in my office, typing citations, processing evidence and making phone calls. Bear season was winding down, with only a fraction of the hunters still in the woods. For those remaining, though, it was one last opportunity to take a bruin before Thanksgiving. I replayed the events of the past two days in my mind. This bear season would be memorable, but it wasn't over yet.

On the opener, my deputies and I were waiting with two other WCOs on Dutch Mountain. We had reason to believe that a group of hunters would be setting up in five treestands baited with piles of corn and apples.

Baiting bears is not taken lightly. Bears can easily become accustomed to food placed out for them, and their daily visits to baited sites become predictable. Shooting a bear in such a situation is against the law, of course, and an affront to the concept of "fair chase," like shooting the proverbial fish in the barrel.

At first light a check of the stands produced only two hunters, each surprised to see a WCO underneath his perch. The two were issued citations and escorted from the area. I thanked my fellow officers for their assistance, a little embarrassed at requesting the "overkill" in personnel.

From there, the long opening day spent patrolling turned into a long opening night at the Hillsgrove Ranger Station, where bears were being processed. The check station was crowded, as 2003 was a banner year for bears. For a WCO in Sullivan County, the opening day of bear season is at least 16 hours.

The second day of the season was a little more eventful. Deputies Frank Miller, Mark Forwood and I stopped at the Hillsgrove Ranger Station early that afternoon. A baited stand we had checked on the opening day and earlier that morning hadn't been occupied, and we surmised that it might have been set up for the upcoming deer season. A steady stream of vehicles was now bringing bears in to be processed. Two hunters arrived and backed their truck up under the scales with a pair of bears weighing around 200 pounds apiece.

Frank asked one of the excited hunters where they had taken the bears. To Frank's surprise, the hunter indicated that both had been taken in the same area we had under surveillance for baiting. I asked the other hunter about where the bears had been taken, and his answer provided me with sufficient evidence to seize the bears and initiate an investigation.

We met both hunters at their camp, were shown the entrails and where each was positioned when they fired. A light dusting of snow the night before helped our investigation tremendously. Both of these bears had been drawn into shooting range by cracked corn, apples and scraps from camp meals. Evidence of the bait was collected, photographs were taken and measurements at the scene were made. The bears were seized, tagged and taken to the Northeast Region Office. By the time Frank and I arrived back in Sullivan County, it was well into the evening.

The next morning the region office dispatcher called with information about a large male cinnamon phase bear being shot over a bait pile near the Bradford County line. We even had the name of the suspect. The hunter had the bear processed in Hillsgrove earlier that day. After picking up Deputy Miller, we stopped at the check station. We learned that a cinnamon phase bear weighing 380 pounds had been brought in by a guy named Randy Johnson, who had been hunting out of the Crooked Pines Camp in Fox Township. The report on the bear indicated it had not been field-dressed. Its coloration made this bruin quite unusual; only two to three percent of Pennsylvania's bears have this genetic cinnamon phase anomaly.

Frank and I said nothing as we made our way to the northeastern end of Sullivan County. We were pondering the many variables of the situation. Was the information accurate? Would we find the bait

and the kill site? Had the suspect left the county?

Beginning our search near some landmarks provided by the informant, we soon spotted a wooden sign with the name "Crooked Pines." Pulling into the drive and discovering four trucks parked outside of a rustic cabin, we started to feel optimistic that our suspect hadn't left. Frank walked over to a white Dodge truck, peered into the bed and then waved me over. A bear with a remarkable dark rust-color coat lay in the bed. Its large shoulders gave it an almost grizzly bear-like appearance.

We knocked on the door. "State officers. We're looking for Randy Johnson," I announced. A figure finally appeared in the shadow behind the screen door. The man was tall and lanky with a scruffy beard, long brown hair and chiseled facial features.

"I'm Randy Johnson," the man said, his voice cracking with apprehension. "What do you want?" I explained that we were checking out information about the bear he had shot. After checking Johnson's ID, Frank and I asked him about his bear. He explained that he had killed it "way up on the mountain," pointing past a Boy Scout camp and into the interior of SGL 12. I then asked him to show me the kill site and where the bear had been loaded into the truck. When Johnson began wondering if he could find either of those two locations, Frank and I knew something was up, but the trick would be in proving it.

We secured identification from three other men in the cabin, and our suspect reluctantly agreed to try to find the kill site.

The quickly assembled plan was to have Frank wait near the cabin while Johnson and his hunting partner, Tom, joined me in the hike to the site. Frank and I were to maintain constant radio communication in case something went wrong. The truck with Johnson and Tom pulled out of the driveway and made a left on the township road as I followed close behind. There was no doubt in my mind that this was going to be a wild goose chase. If there was a bait pile, it would be behind the cabin, along with the other evidence we needed. This initial exercise was just a matter of giving them enough "rope." And these two were reeling it right in.

The vehicle made a right turn onto a dirt road leading into Boy Scout camp property, only a few hundred yards away from Crooked Pines. Johnson and Tom came to a stop at the base of an incline. Johnson walked back to my truck and nervously informed me that they were not allowed to drive any farther up this road, even though (according to them) they had earlier. "You are today," I said. "Keep going." The duo drove a few hundred yards to the far end of a grassy field, then the three of us assembled to review the suspect's story. "The bear was running toward the swamp," Johnson began, while motioning his arm from left to right. "I fired two shots and the bear dropped down there." His story of the bear being shot "way up on the mountain" was now contradictory. Plus, the distance between where the three of us stood was only a "drive and a pitching wedge" back to the cabin.

I then asked Johnson to point out the exact spot where the bear was lifted onto the truck. He gestured to a general area on the ground that was conspicuously free of any tire marks or the swath one would expect from a bear weighing nearly 400 pounds being dragged across the ground. When I commented on the lack of any drag marks, Tom offered, "we carried it out."

I tried to imagine two men carrying a bear that size out of the woods. It was inconceivable. There was clearly no evidence of a vehicle or dead bear recently being in this area. Now that I knew what didn't happen, it was time to find out what did. "Let's head back to the cabin, guys. I've seen enough here," I said.

Back at Crooked Pines, I asked Johnson to show me the area behind the cabin. As Frank and I turned the corner, evidence of baiting became glaringly evident. Large piles of corn and sunflower seeds lay on the bare ground in the small yard. Suet blocks and leftover mesh suet bags were strewn about. Discarded meat and other leftover food items were also evident. It's a start, I thought. What we needed, though, was something to connect the bait in the yard with the bear in the back of that Dodge, and a bear that had not been field-dressed at that.

While Johnson stood by, Frank and I began to search for evidence. Tire tracks in the area suggested a truck had been driven behind the cabin recently, but the tire impressions were relatively weak. After several desperate minutes of looking, our hope was beginning to wane. It would be hard to prove a case of someone killing this bear illegally with what little evidence we had so far. Finally, though, I noticed something not quite right.

Near the far corner of the cabin some saplings appeared to be bent over. Upon further inspection, it became increasingly clear that a truck had backed up over the small trees and continued into the sparse woods. A short distance into the woods the trail ended at an area where the leaves had been disturbed. As I knelt down to inspect the ground at the end of this swath my pulse quickened. There it was: a few drops of blood on some dry leaves. "Hey, Frank, over here."

Frank retrieved the evidence kit from the truck. After donning latex gloves, we began processing the trace amount of blood and other evidence, placing it into bags, then carefully labeling the contents. While bagging the evidence, I turned to Johnson, who was watching nearby, and said, "Kind of tells a story, doesn't it?" Johnson shrugged his shoulders and stared at his boots.

I instructed everyone to head over to the Hillsgrove Ranger Station. While seated in the conference room, Johnson was presented with the blood samples collected and bait evidence. Informed of the charges that would be filed against him, he was given the opportunity to come clean, but he stood by his original story. He was also informed that all present at the cabin could be charged with possession of an illegally taken bear.

I suggested that the evidence was clear: The bear was drawn in behind the cabin by the bait and shot from a cabin window, probably at night. It ran a few yards into the woods and died. A pickup was then backed up to the bear and it was loaded into the bed. The truck damaged the saplings. The few drops of blood found at the site would be matched with DNA samples from the bear, and I'd bet the barn on it that they'd match. Johnson just stared and asked if that was all. "It is for now," I said.

Evidence collected from the bear included hair, blood and tissue samples, as well as a sample of the stomach contents. Not surprisingly, the stomach contents consisted largely of partially digested corn and sunflower seeds. The cinnamon bear was stretched across the rack of the state vehicle as Frank and I meandered down Red Rock Mountain toward Dallas. I was confident that the evidence, combined with the defendant's contradictory statements, would be sufficient to successfully prosecute the case. The blood and tissue evidence would eventually have to be sent to the USFWS Forensics Laboratory in Oregon, for DNA analysis. It could be as long as a year before the results were returned and the case went to trial. If found guilty, the defendant would pay the cost of all laboratory tests, as well as costs associated with having an expert witness fly out from Oregon to testify. We were looking at another long night, but we were satisfied on how the case was progressing.

Citations were filed on Johnson at the District Justice Office in LaPorte. He was charged with hunting in an area where bait was used as an enticement for wildlife and being in possession of a bear that had been unlawfully taken.

A few days later I received a message from the Dallas office to call Johnson. He wanted to plead guilty to both charges. On the phone he gave me the real rendition on how the events unfolded. It seems that the bear was heading into the baited area and he shot it from the cabin. A truck was backed across some saplings to where the bear had died and the tailgate dropped. It was then loaded into the bed of the truck and taken to Hillsgrove. No surprise there.

The following week Johnson pled guilty to both charges. Fines exceeded $1,000 and he lost his privilege to hunt in Pennsylvania for three years. It was later determined that the bear was the largest cinnamon phase black bear killed in here during the '03 season. The bear was subsequently donated to Worlds End State Park in Sullivan County, where a full body mount will be displayed at the Visitors Center.

- William M. Williams, Sullivan County WCO

Duck Chasers

IT'S 9A.M., I pop two Bonine tablets chased by a quick swig of water and grab the car keys. In an hour I'll be climbing into a very small plane for several hours of unpredictable flight conditions and I'm not taking any chance of loosing my stomach in front of my colleagues especially on my first assignment.

It is a gray day with very low clouds and we'll need at least 1500 feet of visibility to make the run. While we're waiting for the latest weather report and the "all clear" to go, John Dunn and Ian Gregg, two PGC biologists, pull on coveralls and check their helmets.

"Do you wear those so you can talk to each other over the buzz of the propeller?" I ask, pointing to Dunn's helmet.

"Actually," he says, "The U.S. Fish and Wildlife Service (USFWS) requires us to wear helmets, along with these flame resistant overalls, because low-level flying has proven to be particularly hazardous to the lives of biologists." After a short pause he adds, "We don't have any for you." Thinking back, maybe that should have made me nervous, perhaps it was the Bonine.

I squeeze into my assigned seat in the Cessna 182, more compact than I'd imagined. There are seats for four of us, but barely: the pilot, two biologists and me. My camera bag fits too snugly in the space above my feet, behind the front passenger seat and against my shins. In the seat next to me, Gregg is setting up a laptop with several gadgets, and doesn't seem hindered by the cramped quarters. I've been given a headset and shown where to plug it in so I can hear the voices of the biologists and pilot over the (only one mind you) propeller.

Seatbelt buckled, headset on and camera ready I get a glace of Governor Rendell boarding a larger plane bound for DC. I notice, interestingly enough, that he doesn't seem to be wearing fire resistant coveralls.

"Skylane 82 Papa Alpha, you are cleared for takeoff," crackles over the headset.

We leave the Capital City Airport just south of Harrisburg and head up river. For the work we'll be doing today, our optimal height is 500 feet above ground (or in our case water). This requires the pilot to acquire exemptions from both the Pennsylvania Emergency Management Agency and the Federal Aviation Administration. We'll fly as close to 500 feet as we can for the duration of the flight with the exception of power lines, mountains and the like.

We're flying so low because the biologists are searching for and counting waterfowl below us. This is the third and final leg of this survey, until next year, when they'll do it all again.

The first leg took them down the Susquehanna, from Harrisburg to the state-line, around Philadelphia, up to Reading and back. On the second leg, they flew to lake Erie and the Pymatuning Wildlife Management Area. Today's trip will be the north leg of the Susquehanna. At one time there was a fourth leg, around Pittsburgh: it was done for a period of years after the 1988 oil spill but hasn't been done lately.

These aerial surveys have been taking place since 1955 and are part of a nationwide effort to survey waterfowl in areas where they concentrate. Biologists have been flying essentially the same routes since that time. Every January, surveys are coordinated in each flyway as a general inventory of waterfowl species and populations and as an assessment of waterfowl habitat and distribution on wintering grounds. The data is then compiled in a national database administered by the USFWS.

2005 marks the 50th anniversary of the North American Waterfowl Survey of which these mid-winter data sets are a part. The USFWS says the program is the world's most wide-ranging, comprehensive long-term survey of wildlife and that it "represents a 50-year legacy of standardized cooperative surveys performed by the U.S. Fish and Wildlife Service, the Canadian Wildlife Service, state and

provincial biologists, and non-governmental cooperators."

Gregg has his laptop hooked up to a Magellan GPS unit that is tracking our flight path. He's using Moving Map Voice Recording software, and has a small microphone connected to the system. When one of the biologists sees waterfowl below, Gregg gives the mouse a click and speaks into the mic, "Three hundred Canada geese, 80 mergansers, black ducks - four."

Dunn, equipped with binoculars, says, "another hundred Canada geese, 40 mallards," and Gregg relays the information.

Each time he speaks into the mic, the system notes the date, time and GPS coordinates for the species and number of birds recorded. Very cool, I think to myself and wonder what they did back in 1955. Dunn tells me the USFWS is now experimenting with video cameras hooked up to GPS recording systems and mounted to the bottom of the planes they use. Later, the video can be played back through software that will count the birds.

On the laptop screen is a growing red line indicating our path of flight. As we move further on, the line left behind us turns purple. When Gregg notes birds seen, the black outline of a circle appears on the line at the location the fowl were spotted. Though the trail we create isn't overlaid on a map, I can see how it follows the Susquehanna north, taking a detour partway up the Juniata (to Rte 17), doing several loops around the waterfowl management ponds at Haldeman's Island, then continuing on up river.

At Haldeman's we pass a group of gulls (or "sky rats" as the pilot calls them) at eye level. Near Millersburg we see a pair of bald eagles in a tree on the east side of the river. We first come across snow on the ground around Sunbury, and first spot ice on ponds somewhere around the Watsontown Brick Company building, whose large sign happens to be quite legible from 500 feet.

All states in the Atlantic flyway (those from the Great Lakes east to the coast from Maine to Florida) do counts during the same time frame. Most are aerial surveys, unless for some reason (like weather), flights are not possible, in which case surveys are conducted from the ground.

While they admit that they'll have to check the data, Gregg and Dunn seem to think that waterfowl numbers are a bit low for this leg of the survey. They believe both mild weather and high water have played a role in the reduced number of birds seen along this route.

When it's cold and ponds and lakes freeze over, birds tend to congregate in areas of open water. Since the river is moving, it tends to stay open longer and birds concentrate there. With the mild winter we've been having, we've seen very little ice during our flight that would compel birds to gather along the river.

Waterfowl also tend to hang out near the edge of the river. When the water is high, the ducks are often out of sight, under trees and brush that aren't flooded at normal water levels, so birds may not get counted even though they're there because they can't be seen from the plane. Though weather can affect the counts of individual states, sometimes dramatically, flyway counts stay pretty constant.

Data from Pennsylvania and the rest of the Atlantic flyway, along with data from all the other flyways (Pacific, Central and Mississippi) are collated by the USFWS. Twice a year waterfowl biologists and government officials use the data at Flyway Council meetings to discuss the biology and management of these migratory birds. Here, they also set hunting regulations across the U.S. and Canada that both maintain healthy waterfowl populations and provide for the greatest amount of recreational opportunities.

Information gathered through this program helps biologists in many facets of their responsibility to this resource. These data make it possible to assess trends taking place over the long-term such as changes in winter concentrations of waterfowl and in habitat use, both within and among flyways. They help document critical associations between specific species and specific habitat and address

fundamental questions about population dynamics. Data from these surveys can be critical to both state and federal agencies in matters of land acquisition, mitigation negotiation and environmental impact assessments. For some species, such as tundra swans and brant geese, these data are the only available information on the status of their populations.

When we reach the riverside town of Montgomery, we cut east to the PP&L plant at Washingtonville and do several fly bys of the nearby ponds to count birds there, before heading home.

Until this point, the trip has been rather quiet but we'd hit a warm front near Sunbury that began to toss us around a bit. Now my stomach feels better when I keep my eyes on the horizon as opposed to the ground, my notebook or the camera. Though I'm enjoying the view, I am relieved to hear the pilot's voice break through the whirr in my headset, "Requesting Harrisburg Approach, Skylane 82 Papa Alpha."

We fly over the Capital and enjoy a flawless landing. Then, as is customary with Dunn and Gregg, we celebrate the fact that we've survived, at a local diner. There we fill our cautiously empty, but now growling and restless, stomachs as we chat about ducks, geese and future adventures.

- Lori D. Richardson, PGC Education Specialist

What “You” Think about Hunting PA

YOU MAY HAVE BEEN one of more than 900 hunters to receive a phone call last May as part of a survey conducted for the Game Commission, by Responsive Management, to help us learn about your participation in, motivation for and satisfaction with, hunting here.

Hunters were selected randomly from a list of those who purchased 2000-01 licenses. The survey took 20 minutes and consisted of more than 100 questions such as: What is the main reason you hunt? How likely are you to go hunting? How satisfied are you with your hunting experience? What would encourage you to hunt more? and, How do you rate the Game Commission?

Here's what "you" had to say:

Why Do You Hunt?
Thirty-seven percent of you said that sport and recreation are the main reasons you're out in the field. Other reasons include spending time with family and friends (22%), being close to nature (15%), relaxation (12%) and for the meat (11%).

What Do You Prefer?
The majority of you (92%) use rifles, followed by 55 percent favoring shotguns, 35 percent choosing bows and 16 percent heading out with muzzleloaders. Forty-five percent of you are hunting primarily on private land.

The vast majority of you (75%) hunted less than 30 days in the 2002-03 license year, with 26 percent hunting less than 20 days, and 35 percent less than 10.

Most of you are deer hunters (83%) and half of you (49%) hunt turkey. Other game pursued include squirrel (40%), cottontail rabbit (38%), pheasant (35%), ruffed grouse (29%), black bear (17%), woodchuck (12%), crow (6%), bobwhite quail (5%) and snowshoe hare (2%). Comparitively speaking, this ranking is similar to the agency's Game-Take survey. But from the annual survey, we know that the percentage of deer hunters stays pretty consistent over time, while the percentage of hunters pursuing most of the other species varies from year to year.

Immediate family members are your most common hunting companions (63%) followed by friends (36%) and extended family (21%), and 19 percent of you usually hunt alone.

How Much Do You Hunt?
The survey separated respondents into three categories: active hunters, inactive hunters and ex-hunters. Active hunters (88%) were those who had hunted in at least one of the past two seasons (2002-03 or 2003-04) and intend to hunt in the future. Inactive hunters (6%) did not hunt in either of the previous two seasons but intended to hunt in the future, and ex-hunters (less than 3%) did not expect to hunt in this state again.

According to license sales, the number of people who hunt in Pennsylvania has remained relatively stable, with only a slight decline since 1980. Survey data indicates that the vast majority of Pennsylvania hunters are generally quite avid, meaning that they hunt every year. More than half (58%) are hunting just about as much as they have over the past five years, and 17 percent said that they've been hunting more.

Of the three percent who do not intend to hunt in the future, the ex-hunters, the main reasons are health and age related (35%). Other factors causing you to give up hunting are: lack of time (23%), the places you used to hunt are gone or developed (8%) and lack of game (8%).

Most of you (61%) are hunting small game less. For those who aren't hunting small game as much as they used to, the main reasons are lack of game (39%), lack of time (21%) and age or health related issues (14%). It's interesting to note that survey results indicate that hunters who have never hunted small game are more likely to become inactive or ex-hunters.

Why Would You Hunt More?
The most likely reason that would encourage you to spend more time afield is a child asking to be taken hunting. Number two is an invitation from a friend. This information mirrors research conducted for the National Shooting Sports Foundation STEP OUTSIDE program, indicating that an invitation to go hunting is an important factor in encouraging people to hunt more often or, in the case of an ex-hunter, to hunt again.

Vacations that offer hunting experiences, more opportunities to hunt big game, more opportunities to hunt on private lands and opportunities to hunt on Sunday also topped the list of factors that would encourage you to hunt more.

Fifty-eight percent of you said that more small game hunting opportunities would encourage you to hunt more. Sixty-six percent said the same about opportunities to hunt big game. Small game species favored for more chances to hunt are pheasant (55%), cottontail rabbit (33%), grouse (21%) and squirrel (17%). Big game favorites are deer (78%), bear (28%), turkey (20%) and elk (18%).

Are You Satisfied?
For the most part, you feel positive about your hunting experiences. Seventy-nine percent of you were very or somewhat satisfied with your Pennsylvania hunting over the past two years. Only 10 percent were dissatisfied.

What Frustrates You?
Work obligations (50%), lack of game (48%), poor behavior of other hunters (37%), lack of places to hunt (37%) and lack of Sunday hunting opportunities (36%) are what interfere most with your enjoyment of hunting.

It's interesting to note that Pennsylvania's ex-hunters seem more frustrated with a lack of game and a lack of access (whether they're perceived or actual) than ex-hunters at a national level. Of the 23 Pennsylvania respondents identified as ex-hunters, 14 (60%) said that not enough game strongly or moderately influenced their decision to stop hunting; 46 percent said the same about lack of access.

How's the PGC Doing?
Most of you shared positive opinions of the Commission's ability to manage wildlife and hunting seasons. Seventy-one percent gave good or excellent ratings for providing hunting opportunities, and 62 percent believe the agency is doing a good or excellent job managing and conserving wildlife. Additionally, 69 percent of you gave law enforcement good or excellent performance ratings.

Now What?
Two types of issues influence how much you hunt and how much you enjoy hunting: social-psychological issues and resource related issues. Social-psychological issues are work and family obligations, age, health and lack of time, and these are beyond the Game Commission's abilities to influence. The agency does, however, play a role in some of the resource related issues - availability of game, game law violators, availability of places to hunt, lack of Sunday hunting, complex regulations and number of hunters in the field, to name a few.

What We'll Be Doing:
The Game Commission is reviewing the findings of this report and others to find out how we can serve you better. We're already working to make it easier for you to find private properties open to public hunting through our Public Access Program. Believe it or not, there is private land open to public hunting within 10 miles of nearly every Pennsylvanian.

We'll be looking at ways to create new hunting opportunities, including the possibility of Sunday hunting, and we'll continue promoting ethical hunting behavior and investigating ways to recruit new hunters.

What You Can Do?

In Pennsylvania, and across the nation, our hunting population appears to be getting older. Yes, of course, we're all getting older; what this means is that the average age of hunters is older than it used to be. Participants in this survey averaged 47 years of age, most falling into the 45-54 age class. Survey data from the U.S. Fish & Wildlife Service estimates that, in 2001, the majority of PA hunters fell into the 35-44 age class, and in 1996 the 35-44 age class also ranked largest, but with 11 percent more hunters than in 2001.

In essence, the number of young men and women entering the hunting population has been too small to counteract this aging overall average. Therefore, knowing hunters, as a group, are aging, and because health and age related issues are the most common reasons people become ex-hunters, we can predict that an increasing percentage of hunters will be dropping out in the coming years. This means that recruiting new hunters will play an even more important role in sustaining hunter numbers.

Hunting is a great way to spend time with family and friends. If you'd like to take someone afield with you for a special day and aren't sure how to approach him or her, visit the STEP OUTSIDE website at www.stepoutside.org/card.html to print a "gift certificate" for an experience they can't resist. On the other hand, if you're the one anxiously awaiting a hunting experience, you can also visit the site for an equally appropriate "greeting card" designed specifically to help you ask for an invitiation from that special hunter.

Something we can all do now to help the future of hunting is watch how we behave, and how our behavior may affect nonhunters. Rude, unethical and illegal actions aren't just wrong and they don't just reflect poorly on the person behind them. They also reflect poorly on the hunters (most likely family and friends) that accompany the wrongdoer, and on hunters in general. One hunter's unfit actions can create ugly impressions of all hunters among the general public and worse yet, cause other hunters, including a wrongdoer's own hunting companions, to enjoy the sport less or, perhaps, even give up the pastime altogether. Be polite to landowners and above all, behave out there.

Lastly, visit the agency's website, www.pgc.state.pa.us, for information on hunting, wildlife and Game Commission programs. Though 67 percent of you have access to the Internet in your home, less than 43 percent of you have visited our website. Checking out our website, and continuing to read Game News, will help you stay informed on all the latest news and issues.

If we all do our part, we'll help ensure many satisfying hunting experiences for our future hunters (young and old alike) and we'll be able to pass on the gratifying tradition of enjoying the outdoors as only dedicated sportsmen and sportswomen can.

Responsive Management specializes in public opinion and attitude surveys relating to natural resources and outdoor recreation. This important research helped put us in-touch with what you (our hunters) need, want and wish for.

To view the entire report, visit the Responsive Management website at www.responsivemanagement.com. Click on Natural Resources & Outdoor Recreation Research, Hunting, Click for a list of reports and finally Factors Related to Hunting Participation in Pennsylvania.

- Lori Richardson, Education Specialist

The Game Preserve Poacher

I HAD little time to prepare for the hunting season. I had spent the previous six weeks at Ft. Leonard Wood, Missouri, for training with the military. Typically, it's busy from the start of the early goose and dove hunting seasons, and it was already October and I'd spent little time in the woods. This year we would have to rethink our methods of patrolling. Little did I know what was in store for my deputies and me.

Our heavy workload made it difficult to concentrate on specific areas during the archery season, so we spent our time putting out small fires on a daily basis. During the third week of the season, Deputy Roy "Whitey" Lerch noticed a Dodge pickup parked on Game Preserve Road, which is unusual, because hunting is not permitted in this area.

The Lehigh-Trexler Game Preserve was once owned by industrialist General Trexler. The property was deeded to Lehigh County in 1935, following Trexler's death, to be a public preserve, for wildlife, especially the general's elk and bison herd. With no public hunting allowed, the property has become a sanctuary for deer, turkeys and other game, and a prime area for poaching.

"There's only 30 minutes till dark; let's sit on it," I said. "I'll be right over."

Nearly an hour went by until, finally, we spotted a light coming down through the woods. The light then went out and then, suddenly, the interior lights in the truck came on, startling Whitey and me.

"Do you think he saw us?" I asked.

The interior light was bright and blinded our vision, but we heard the fence rattle and the rustle of leaves, and out walked an individual from the game preserve. Whitey confronted the individual as he approached his truck.

"Officer Lerch, with the Pennsylvania Game Commission," Whitey announced. "May I ask what you are doing here this evening?" It was quite obvious, as the individual was dressed in camo, carrying a bow and a treestand on his back.

"I was just hunting up on this ridge," responded the hunter, who we later identified as Greg.

He tried to tell us that he didn't know he was in the game preserve, despite posters on nearly every tree and a fence along its borders. It was obvious to us what Greg was up to. This time of the archery season required bowhunters to wear fluorescent orange while moving to and from their stand location. Greg had no orange on, nor was he displaying his hunting license, which was a sure way to hide his identity if he was seen in the park.

The next day dispatcher Ed Shutter said he had just received some good information about the incident we had been on the previous night. The word that someone got caught hunting in the game preserve traveled quickly.

The information came from a guy we knew as John. John frequently hunts on the game lands near the preserve, and is aware of everything happening in the area. John appeared to be fed up with the amount of poaching that was going on.

John told us that a guy named Eric shot three bucks - two 8-points and a 9-point. Supposedly, Eric has a crossbow permit and used a crossbow to shoot the deer. Eric was from Palmerton and had been hunting with two other guys from that area, Greg and Frank. It just so happened that the Greg we had met the night before was from Palmerton.

Having already made contact with Greg, we suspected that the trio would now be more careful when going about their illegal activities. That Saturday, we developed a plan. Deputies Bob Yeager, Whitey, Joe DiMaggio and I made a sweep through the preserve on foot. We chased a lot of deer and

turkeys, but didn't find anyone hunting.

After a similar sweep the next weekend yielded the same results, Joe commented, "This is just Mike's way of trying to get us into shape."

"There is nothing wrong with getting out and walking once in a while," I quipped. I knew my deputies were frustrated, but we weren't going to catch these poachers sitting in our trucks.

One afternoon I noticed another truck parked along Game Preserve Road. I had Jim and Whitey set up in their vehicles to watch, while I sat nearby in the woods. During the surveillance a vehicle drove up to Jim and Whitey. It was John, our informant. "They shot two 8-points and a 7-point," John exclaimed. "I hope you catch those guys. They're taking all the big bucks from us." The deputies assured John we were doing our best.

By now it was dark, and we expected to have a hunter show up at any minute. And with a license check indicating the truck we were watching was registered to a person from Palmerton, we felt we were on the right track.

As we waited, John pulled up along Whitey's truck again. "I spotted lights. They're sneaking out the backside of the preserve," John said.

Upon hearing the news I ran to the area John described. It must have been a half mile away, but I knew a shortcut and got there in no time. Jim and Whitey left their post and headed to the area where John had noticed the lights. Jim could see lights, but did not notice them moving. Calling on the radio he was able to position me where I could plainly see the lights. From my position I could easily see it was the lights in the zoo area that they had been looking at. With the wind blowing through the trees, it appeared that the lights were moving.

"Let's return to our positions," I radioed. By the time we returned, though, the vehicle was gone.

The next morning John called again, "Mike, they're at it again, but this time on Mill Creek Road."

With it raining out I was hoping to spend time in my office, but the paperwork would just have to wait. "I'll be right there," I replied.

This time two individuals had been seen dragging a doe from the game preserve. They got into a black Chevy pickup without a tailgate and left with the deer. We were too late, but this was a break, because now the suspects had been seen with a deer, and because we now had descriptions of Eric and Frank. Eric was described as a tall male in his 20s, with blond hair and blue eyes. He was the one who had been reported killing the big bucks.

A couple of days later I drove past the same area and spotted a black Chevy pickup with no tailgate. This time we were not letting them get away.

Luckily, Whitey (who has been serving as a deputy for more than 37 years) was out picking up a roadkill and available to help. I hid the state truck and started walking. The game preserve is extremely thick, so it's best to walk the deer trails. Luckily, the trails are abundant and heavily traveled. After walking for nearly two hours and finding no signs of anyone being in the preserve, I stopped to take a drink of water and heard some noise in a tree.

A hunter was just 20 yards away, sitting in a portable treestand. Fortunately, he hadn't seen me, so I slowly backed away and sat down behind a bush. The hunter had a crossbow, so I assumed it was the person we were looking for. After about 20 minutes the hunter climbed down, and I radioed Whitey to let him know what was going on. "I'll follow him and see if he leads us to anyone else in here," I said.

I must have followed the hunter for a couple hundred yards. It appeared he was looking for a new spot to hunt from, so I decided to confront him. "State officer," I said. "I'd like to check your

license." The hunter was, to say the least, surprised. He was about 6-2, with blond hair and blue eyes. I was quite sure this was Eric, and after checking his license, I was positive.

"Eric, you're hunting in a public park and you're not wearing the required fluorescent orange," I told him.

"You're right, you caught me," he replied.

It seemed too easy. I escorted him out to Mill Creek Road where Whitey met us. I told Eric we needed to talk some more about the deer he shot in the preserve. He assured me that he had not taken any deer. "Can you explain the deer you were seen dragging out of the preserve a few days ago?" I asked.

"Frank shot that deer," Eric replied.

We told Eric we needed to go back to his house and talk. Our informant had told us that there were antlers on a table in Eric's backyard. WCO Ray Lizzio was radioed to assist us, because we would be in his district. Ray arrived at Eric's house before us, so he drove around to see if there were any signs of antlers or deer. Ray noticed a shed behind the house. The odd thing was that the shed was covered with flies. Ray took a closer look from the alley and could see a skinned deer hanging inside. Ray radioed us about his findings.

As we pulled up in front of Eric's house I asked him one more time if he had shot any deer. His head dropped and there was a moment of silence. "Okay, I shot an 8-point last Friday," he said. "It's hanging in the shed out back."

Eric took us to the shed to see the deer. It had been hanging for five days in 60degree temperatures. The deer was green, covered in flies, and had a stench that would knock your socks off. Looking at Whitey and Ray, I could see the disgust in their eyes. In the meantime Whitey told me he had noticed two 8-point racks and a 7-point rack on the picnic table, so we went to take a look. "Eric, this doesn't look good," I said.

"I found those on Broad Mountain," he replied.

"Come on, Eric, this is your one chance to tell the truth," I told him. "You lied to us earlier." Again there was silence.

"Okay, I shot all of the deer in the preserve," he mumbled.

Again, for a moment it almost seemed too easy, but for all crimes this guy had done, we wanted to record them on paper. For the next hour we sat in Eric's kitchen, taking statements. He identified all the deer and the days they were shot. His excuse was that he had been laid off from his job, shot the first 8-point and did not want to end his hunting season so soon. A big 8-point was the last deer he had taken. He had plans to mount it and enter it in a big buck contest. I wondered how anyone could take pride in such a "trophy."

After nearly two weeks of trying to catch up with these guys, Whitey had a smile from ear to ear, knowing that all the hard work had finally paid off. Charges were filed for four illegal deer, wanton waste, lack of fluorescent orange and hunting in a public park. He's on a hunting license revocation for a long time, now, and we'll be out there watching to make sure he doesn't make any more clandestine trips into the park, or anywhere else, in the meantime.

- Michael Beahm, Lehigh County WCO

Monday Night Poachers

DEAD 8-point bucks don't just disappear, but as I followed the trail to its end, it certainly looked like this one had sprouted wings and flown off into the starlit sky. Standing in a field that sparkled with autumn's first hard frost, all I could do was shake my head as I studied the spot where a buck and several suspected poachers had crossed paths. Somehow, all had disappeared.

It was November 2002, and things sure can change quickly for a WCO during the fall. Thirty minutes earlier I had been watching Monday night football when my phone rang. Rich, a region office dispatcher, was on the other end of the line.

"I just got a call from someone who said there is a deer with an arrow sticking out of it lying in a field."

"Well, it is archery season," I replied, knowing that Rich already knew that.

"The caller said that the deer had just been shot," Rich added.

I called the witness, who excitedly told me the same thing, and that I needed to hurry because he was sure that someone was going to retrieve the deer. I got directions, jumped into my uniform and drove to the sleepy Greene County village. When I arrived at the address, a car approached and a couple guys jumped out. "You just missed them," they said. "The deer is gone, and we're sure they put it in that little red Ford Ranger you just passed."

"Tell me what happened," I said.

The witnesses quickly informed me that while spotlighting they saw a large buck dead in the field, an arrow in its side, with steam still slowly rising off of it. Even though curious, they continued spotlighting up the road. Fifteen minutes later, on their way back through, they noticed the deer had been moved. Now, really curious, they got out of their car and followed a drag trail in the fresh frost. It led them to the hidden deer tucked along a creek. While they looked at the deer, a man approached from a nearby house and told them that he had moved the deer. When asked why, he replied, "I thought the poachers who shot it were going to take it."

The witnesses asked if he had called the Game Commission, and the man said that he hadn't called yet. Practically screaming at him, they told him to call and maybe the poachers could be caught.

Going back to their car the witnesses felt that something wasn't right with the story the man had told them, so they called our region office. That's how I ended up where I was, standing in that frosty field instead of watching Brett Favre throw touchdown passes.

The first thing I wanted to find out was how the deer had disappeared. An easy-to-find spot in the field showed where the deer had died. Looking around with my flashlight I could clearly see two sets of human tracks in the frost, coming from the house to where the deer had lain. Following the drag marks to the brushy creek, I found where the deer had been hidden. From there it seemed as though the deer had simply vanished. I could see footprints from the house to the deer, but no sign of the deer being moved.

Following the tracks, I walked about 100 yards and came to a backyard where the man that had approached my witnesses had come from. Fresh tire tracks could be seen where someone had driven down into the yard, but the vehicle was gone. I decided that maybe someone inside could shed some light on what had happened.

I knocked at the door and a woman answered. I introduced myself and said I was there about a deer that had been poached. She said that she didn't know anything about any deer, poached or otherwise, and I believed her. I then asked about the tire marks in her yard, and she informed me that her brothers, Tommy and Joey, had been down there, but she didn't know why. She went on to

say that Tommy lived in Fayette County and that Joey was upstairs sleeping. Not wanting her to think that I was suspicious, I pretended to yawn and mumbled something about people getting all excited about a roadkill, and that I was tired of being out in the cold and was going home to watch the football game.

Leaving the house I called deputy Mike Shipp in Fayette County. "Mike, are you awake?" I asked.

Mike is like most deputies; no matter the time, they're always willing to help.

"Sure, what do you need?" he replied.

I told him Tommy's name and asked if he could find an address in the phone book. When Mike found an address, I asked if he would like to go wait for our suspect to come home. He agreed, and I told him I would get there as soon as I could.

As I was making the trip to Fayette County I was hoping that we would get to Tommy's house before he did. If we did, we would be able to see what he would do with the deer. I met Mike and we jumped in his truck and went to Tommy's house. I filled Mike in on all the details while we waited in the dark, but it turned out to be a short wait. A big white 4x4 truck came down the road and on up to the house. Mike said the driver had to be Tommy, but I was expecting a small red Ford. We decided to see who was home, so I knocked on the door and a sleepy girl answered.

"Is Tommy home?" I asked.

"Nope, he's out hunting," she replied.

I looked at my watch and told her it was well past midnight.

"When he goes to his brother's house in Greene County to hunt, you never know when he'll get home," she replied.

I thanked her, and Mike and I left and went back to our hiding spot. Less than 10 minutes passed when my cell phone rang. It was Rich, the dispatcher, again.

"Hey, there's a guy on the phone who says he has a buck that was poached in Greene County, that he took it home to Fayette County so the poachers wouldn't take it."

"Rich, he's calling because I was just at his house," I said.

"Well, he wants to turn the deer in."

Mike and I turned back up the driveway we had just left, and the white truck's headlights came on and started toward us.

"Hey, that buck you're looking for is at my son's house, follow me," the man behind the steering wheel said.

We made a short trip to a trailer park, and when we pulled into the driveway we spotted the Ford Ranger. Tommy dropped the tailgate and revealed a big 8-point, which had not been field-dressed. We pulled the deer out of the truck and examined the obvious broadhead wound.

"So, Tommy, tell me why this buck that was killed in Greene County is here now with you in Fayette County?" I asked.

"Well, I was over at my brother's house and we saw flashlights and someone in a field. As soon as they left, my brother and I went over to see what was going on." Tommy went on to explain that he found the dead buck with an arrow in it and thought maybe the guys with the flashlights were the poachers, so he proceeded to hide the deer so they wouldn't be able to find it. Then, the men who

had poached the deer came back, so Tommy decided to have a word with them. Tommy said that he told them to call the Game Commission, but he didn't want the poachers to get the big buck so he took it to his son's home. Tommy explained how he was a good sportsman and would never shoot a deer illegally.

"Tommy, you didn't tell them to call the Game Commission; they told you to." I replied.

"They shot the deer and they're lying," Tommy said defiantly.

"Tommy, they called about the deer and you didn't. Why would they poach a deer and then report it?"

Agitated, Tommy replied, "But I did call and report it."

I pointed out that we didn't get a call from him until I had visited his house, almost three hours after the deer had been shot. I continued by saying that I had also talked to his sister, who knew nothing about a deer being killed, and that his brother Joey was there also, and with all the excitement of a deer being poached almost in their yard, confronting the poachers, and loading the buck in a truck so the poachers wouldn't get it, I found it hard to believe that he wouldn't have mentioned something to his sister.

Tommy fumbled to come up with an answer for that. He also was having trouble explaining the whereabouts of the arrow that had killed the deer. This arrow was important, because I could match it to the remaining arrows in his quiver for more evidence.

I told Tommy that I didn't believe what he was saying, that I thought he and his brother had shot the buck with his bow from the house. Tommy kept insisting that he would never do such a thing. Mike and I decided that Tommy wasn't going to change his story, so we left and would investigate more the next day. I thanked Mike for his help as we loaded the deer on my truck and I headed home.

Early the next morning, before the frost melted, I went back to the house where the deer had been shot and asked the sister of the two brothers if I could look around, because someone had killed a buck there the night before. She gave me permission and I found where they were putting out corn for deer, and it was evident that deer came close to the house.

I went back where the deer had been hidden and noticed that there weren't any drag marks to the truck tracks. I also couldn't find the arrow that my witnesses noticed when they first spotted the dead buck. As I was leaving, I looked back at the house and noticed a deck that was 20 feet off the ground. Things were beginning to click. First, though, I needed to talk to my witnesses again, as I had some questions about the arrow.

"It was in the deer when we found it, but I can't figure out one thing," one witness replied. "I'm an archery hunter myself, and I think that buck was shot from a treestand or somewhere high up, because the arrow had entered the deer at a sharp angle."

I later confirmed the wound channel while examining the buck. That was the final clue I needed to test my theory, so next I needed to talk to Tommy's brother, Joey.

Later that day Deputy Dan Barnhart and I listened as Joey told the same story that Tommy had told me the night before. When Joey was finished I decided to test my theory on him, so I said in a conversational tone, "That sure was a big deer. I bet it was heavy when you and Tommy carried it to your truck."

Joey almost groaned as he recalled, "It sure was, I wasn't sure we were going to make it all the way."

"Tell me this, Joey, why did you carry that buck to the truck?" I asked. The blank look and stuttering

effort to reply told me I was barking up the right tree.

"Let me answer that for you. You carried that deer almost a 100 yards so there wouldn't be any drag marks leading to your house, because Tommy shot that deer from the upper deck of your home, while it was feeding at the corn pile in your yard. Both of you were trying to hide what had happened."

"I don't know what my brother did," he hurriedly said, completely contradicting his previous story.

Not done yet, I pressed on. "Then you put the deer in a truck and took it out of the county. And to top it all off, someone shoots a deer in your yard at night and you don't mention it to your sister and then, even though told to call the Game Commission, no one called. Joey, I just want to know one more thing." A humbled Joey looked at the ground while I asked, "Do you think that any judge is going to believe your story?"

Shaking his head, Joey mumbled, "Probably not."

Despite preparing for a court hearing, both defendants entered guilty pleas and paid their $500 fines.

Too often, crimes against wildlife go unpunished because people don't want to get involved, but in this case, having witnesses who stepped forward and offered to testify made the difference. The bottom line is that poaching is poaching no matter what the method, and poachers don't always drive old trucks and shine spotlights out of their truck windows at late hours. Sometimes a poacher is someone who is overcome with greed and can't resist taking advantage of a situation that presents itself. That is what Joey and Tommy did on an early November Monday night in Greene County.

- Rodney Burns, Greene County WCO

Hunters & Trappers Contribute to the War Effort

"COMING in on a wing and a prayer, coming in on a wing and a prayer, though there's one motor gone, we can still carry on, we're coming in on a wing and a prayer."

THAT OLD TUNE from WWII, originally cut to a 72-rpm vinyl record, conjures up an image of a large, lumbering B-17, limping back to England after being hit by enemy fire.

With the rudder shot to pieces, an engine out, and fuel leaking from the starboard tank, the pilot, struggling to keep the Fortress flying, can see the cliffs of Dover ahead. The palms of his hands are sweaty with anxiety. He has no fear, however, of losing his grip on the controls. Between the moisture laden skin of his young fingers and the hard surface of the wheel, is one of nature's most supple fabrics - deerskin.

You may be wondering what a flack-damaged B-17 has to do with hunting. Aviators from Eddie Rickenbacker flying his Nieuport in WWI, to Pennsylvania's own Jimmy Stewart, flying heavy bombers from England in WWII, were grateful recipients of garments provided, in part, by harvested whitetails. Some were Game Commission employees such as Lt. Nicholas Ruha, who wrote that he was flying a lot and dropping bombs with the words "Compliments of the Pennsylvania Game Commission, Division G" written on them.

Soldiering in WWI and WWII was wrought with misery and deprivation. Food, clothing and ammunition were always in short supply for soldiers, airmen and infantry. It took many people behind the scenes, on the home front, to provide the necessities, and Pennsylvania hunters and other outdoorsmen made major contributions in both wars.

In 1943, the U.S. Fish and Wildlife Service (USFWS) began to solicit hunters for deer hides for the production of military equipment. General Conservation Order M-310, issued in June 1943 by the War Production Board, spelled out who could possess deer hides and in what quantity. Hunters could keep hides for their personal use, but the Army asked them to forego such "personal gratification" and give them up. Four pairs of aviator gloves could be made from each hide.

Deer hides furnished ideal leather for pilots' gloves, headgear and mukluks (arctic shoes). In fact, of all types of leather tested by the War Production Board, deerskin proved to be the only suitable material for pilot gloves.

The USFWS published specific directions for skinning and preparing the hides, and states were encouraged to educate hunters on how to prepare hides for the leather market. Hides were rubbed in salt, covered with paper and allowed to dry for eight or ten days. Then wrapped into a bundle, hair side out, and sent to a dealer or tannery.

When WWII started, some states, including Pennsylvania, prohibited the sale of deer hides, but the U.S. Department of the Interior asked those states to repeal the ban during the war years. During the 1942-43 hunting season, hunters nationwide donated 238,000 elk and deer hides. The following season, 162,427 hides were turned in. The War Production Board commended both hunters and state agencies for their cooperation. Hunters' efforts were cited as an "important contribution to victory."

In 1942 the Game Commission launched a campaign called the "Win the War Drive." The agency teamed up with the International Fur and Leather Workers Union to collect, store and distribute deerskins donated by hunters. Hunters were asked to turn in their hides at specified tanneries. The hides were salted, stored and shipped to a central processing plant. The plant donated the chemicals and machinery, and the workers donated their time. After tanning, hides were shipped to New York City to be made into fur-lined vests for the Merchant Marines. Technically civilians, Merchant Marines served on ocean going vessels carrying supplies for American troops. About 7,000 Pennsylvania skins were donated in 1942, one-fourth of the deer taken. By July 1943, 27,000 skins had been donated.

Many of the Merchant Marines wearing these vests sailed the North Atlantic. The route from the United States to England during winter was bitterly cold. So cold that German U-boat crews, whose job it was to sink the Merchant Marine ships, often had to chop loose the built up ice from the topside of their submarines to prevent capsizing. Warm clothing was not a luxury, but a matter of survival for the men sailing those dangerous waters. The constant threat of U-boat attacks required a lookout topside at all times.

Appeals for animal fat were also made during the war. Trappers, fur dealers and rendering plants began cooperating in earnest to save the fats of fur bearing animals to make explosives. The lowly skunk became quite an important furbearer, because one third of the animal is fat. In 1942, Pennsylvania trappers provided 94 tons of fat, enough to produce the amount of glycerin needed to fire 1,880,000 rounds from a Browning 50-caliber machine gun. This was accomplished despite gasoline and tire rationing. Gas rationing hindered local trappers, fur dealers and rendering plants in their ability to collect and transport the fat. The Game Commission appealed to the Office of Price Administration in hopes that more fuel would be made available, but was unsuccessful. Even though the agency was unsuccessful in its bid for more fuel, in 1943, twice the amount of fat was saved for the war - a tribute to the seriousness both the sportsmen and the agency had placed on the collection effort.

The Browning machine gun was used almost exclusively on all American aircraft and coveted by allies as well. American armored vehicles also relied on the gun as an anti-aircraft weapon, often mounted on top of tank turrets. All WWII vets, including those who flew the P-47, with its eight 50-caliber Browning's, can credit their survival, in part, to the lowly skunk. (It would not be advisable, however, to seek out a living descendant of those skunks to give it a little pat of gratitude.)

During WWII, deer hides weren't the only commodities counted. Shotgun and rifle ammunition were in limited supply. In 1943, only one-sixth of the ammunition hunters normally used was issued. The War Production Board approved release of 82,250,000 shotgun shells, 12,000,000 rounds of centerfire ammunition and a limited supply of .22 caliber cartridges. Shotgun shells were made using steel bases, not brass. A ration of 25 shotgun shells, 20 centerfire rifle cartridges and 50 .22 Long Rifle cartridges per individual was imposed. Sportsmen's clubs had to curtail recreational shooting matches due to lack of ammunition and the Commission ardently appealed to the War Department for more ammo for its hunters.

During both world wars, meat was rationed. Hunters harvested extra food for the table so that domestic livestock could be processed for fighting men. In 1917, a press release by the U.S. Department of Agriculture exclaimed, "Save the does. During the coming hunting season kill only full-grown bucks." The reasoning behind such a request was that the average doe weighed less and, therefore, yielded less meat.

Hunters were told by the federal government to make every deer count by following these recommendations:

- Do not kill a spike buck or doe when you can obtain a full-grown buck
- Do not kill a deer when weather conditions or difficulties of transportation prevent saving the meat
- Save every pound of meat
- Save the skin and the head also if the antlers are in good condition
- Do not shoot deer at night, or in the water, or unless you can clearly see that the animal aimed at is a full-grown buck

Amid WWII, the USFWS produced a leaflet titled *Save Game Meat-It's Valuable.* Meat purchased in the store was limited to 2½ pounds per week for anyone over 12 years old. This rationing resulted in soldiers having meat on the frontlines, and in more hunters bringing home wild game for the table. The 135,000,000 pounds of wild game normally used in American homes during hunting seasons released sufficient beef, mutton, pork and poultry to feed an army of 5,000,000 men for two months.

Hunters were also encouraged to harvest ducks and geese and salvage the feathers. The feathers were used to line aviator suits. Harvest figures nationwide for 1943, as provided by the USFWS were: 614,000 deer, 34,000 elk, 9,000 antelope, 71,090,000 small mammals, 41,410,000 upland game birds, 16,700,000 ducks and 11,518,000 other migratory game birds.

Killing more deer did not come without critics. A few sportsmen felt that a powerful movement was underway to slaughter deer and elk herds, spurred on by the "more-meat-at-any-cost crowd" and large animal livestock interests.

Hunters were asked not to waste anything. Soon, recipes for muskrat, possum, groundhog and raccoon were turning up in *Game News*. Muskrat pie, fried muskrat, broiled muskrat, smothered muskrat, Maryland potted muskrat, pickled muskrat, and stewed muskrat livers just to name a few.

Predator and rodent control took on added urgency during the war. Dr. Ira Gabrielson, Chief of the USFWS, said that "control of harmful and destructive birds and mammals is also essential in the efficient production of supplies for war purposes, and losses to stored grains, foodstuffs and cloth fabrics credited to rodents and mice in the U.S. during World War I amounted to many millions of dollars." The fox became Public Enemy No. 1 as the number of trappers declined. A dramatic shortage in traps complicated the issue and snares became legal as a result.

Beginning in 1941, *Game News* also got into the war effort by publishing pictures and brief descriptions of "Those in Service," to honor employees who had joined the military. It initiated a program called *Breaching the Gap*, entreating those renewing subscriptions to send along an additional 50 cents (the one-year subscription rate at that time) so that a soldier in the field could receive the magazine. It was a real morale booster. One soldier wrote that his *Game News* was "passed around so much that it soon wears out."

Furs were important also. Before the war, the U.S. imported furs from China, Russia and Australia. Due to the war, half the $250,000,000 fur requirement was cut. In May 1944, the War Emergency Board announced that through the efforts of 3,000 fur garment collection points, 50,000 fur-lined vests were delivered for Merchant Seamen. However, the Board was urgently in need of more fur garments.

Many sportsmen's clubs organized drives to collect rubber, tin, lead, iron, steel and other scrap metal. In order to save metal for the military, the Commission stopped producing tin licenses, switching to fiber instead. The government drafted steel used to make traps for tanks, ships and planes. Sportsmen collected used cartridges and shells to salvage the brass, and each city had a local Metal Salvage Committee as part of the National Salvage Program to recycle used ammo.

Several county sportsmen's leagues adopted specific guidelines for contributing to the war. For example:

> **Tioga County Consolidated Sportsmen's Pledge**
>
> *I pledge my heart and my right hand to my flag and my country.*
>
> *I further pledge myself to help carry out the wildlife conservation program, now in progress in Pennsylvania, to the end that your boy and my boy, now serving his country, may find the good hunting and fishing he has a right to expect, when he returns to civil life.*

A portion of the *Sportsman's Golden Rule*, adopted by the Montgomery County Fish, Game and Forestry Association, emphasized security and patriotism.

Security - be extra careful in handling firearms. Hospitals, doctors and nurses are too busy with regular duties these days. Do not add to their burdens by being careless with your gun.

Patriotism - Do not waste a pound of edible game meat, or a single shell; share both with others less

fortunate. Save animal fats and deer skins for the war effort. Remember that your comrades in the service deserve good hunting when they return home from the battlefront.

Even the Executive Director of the Game Commission, Seth Gordon, promoted his own *Code for War-Time Sportsmen*:

- Share your ammunition - make every shot count
- Food will win the war - waste not a single pound of edible flesh
- Salvage hides, fats and feathers to provide the sinews of war
- War production comes first, but go hunting as often as you can
- Share transportation with your neighbor - save gas and rubber

By the end of 1944, almost 35 percent of the Game Commission's employees were in the armed services. That same year, the PA Federation of Sportsmen's Clubs resolved "that arrangements be made to provide free hunting licenses to residents in the armed forces for the duration of the war."

Our hunters and trappers led the way in the formation of the PA Game Commission; they showed their determination and tenacity once again during the wars. The result was the Treaty of Versailles ending WWI and the total defeat of both Imperial Japan and Fascist Germany in WWII. Sportsmen did not single-handedly win the war, but they came through with a proud historical contribution to society -patriotic service - both overseas, and on the home front.

- Roxane S. Palone, PGC Commissioner