

— PA — Environment Digest

*An Update on
Environmental
Issues in
Pennsylvania*

Edited By David E. Hess, Holston & Crisci

July 17, 2006

Rivers Conservation and Fly Fishing Youth Camp Graduates 32



Thirty-two students graduated from the 12th annual [Rivers Conservation and Fly Fishing Youth Camp](#) on June 23, completing a course of study that included subjects such as hydrogeology, wetland study, and benthic macro-invertebrate study.

The keynote address was provided by Dr. Robert Behnke, Professor Emeritus of Fisheries Biology at Colorado State University, and one of the premier salmonid biologists in the world.

The students also participated in stream habitat restoration on the Yellow Breeches Creek as well as courses in fly tying, casting and fishing techniques. The camp was again held at Allenberry on the Yellow Breeches Resort in Boiling Springs.

Amber Mancini of Old Forge was this year's recipient of the Leon Chandler Award. The award is given in memory of the late Mr. Chandler to the student who best exemplifies the qualities demonstrated to previous campers by Leon. Amber exhibited a quiet can-do attitude, showed a willingness to help other students and share her knowledge and went about her tasks quietly.

Registrations for the 2007 camp will begin to be accepted on November 1. For more information visit the [Rivers Conservation and Fly Fishing Youth Camp website](#).

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Session Schedule

The Senate and House return to session on September 25.

On the Hill

- Bills on the Governor's Desk

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- County By County Breakdown Shows Extent of Abandoned Mine Problem in PA
- Funding for Watershed Specialists Continued for Another 2 Years
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Environmental Heritage

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Feature

- Natural Challenges Confront Elk Calf Study Team, By Joe Kosack, Game Commission

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On the Hill

Bills On the Governor's Desk

Several environmental bills were signed into law and one vetoed this week by Gov. Rendell. His desk is now clear of bills passed before summer adjournment of the General Assembly. Here's the rundown....

State Budget Related Tax Changes: The state budget is in [House Bill 2499](#) (now Act 2A) and the related tax bills implementing budget agreements are in [House Bill 859](#) (Tax Code now Act 116), [Senate Bill 300](#) (Tax Code now Act 67), [House Bill 1992](#) (Fiscal Code now Act 66) and [House Bill 185](#) (Education now Act 116).

Environmental Capital Budget: [House Bill 2317](#) (Feese-R-Lycoming) establishing the 2005-2006 Capital Budget for flood control, Keystone Recreation and Environmental Stewardship projects was signed into law as Act 83.

Storage Tanks: [House Bill 1195](#) (Yudichak-D-Luzerne) that makes changes to the program to help underground tank owners upgrade tanks was vetoed by Gov. Rendell

saying the expansion of the tank programs it contains were not supported by additional revenues. **NewsClip:** [Governor Vetoes House Bill 1195](#)

Oil and Gas Leases: [Senate Bill 594](#) (MJ White-R-Venango) establishing the Dormant Oil and Gas Act to create trusts for prior oil and gas well owners was signed into law as Act 115. **NewsClip:** [Governor Signs Senate Bill 594](#).

Penalties for Non-Native Fish: [House Bill 1320](#) (Reichley-R-Berks) establishing penalties for the sale, transport, possession or release of non-native injurious fish was signed into law as Act 75.

In Other News

Allegheny Energy Invests \$550 Million to Reduce Air Pollution, Mercury at Hatfield



Allegheny Energy, Inc. announced plans this week to install flue gas desulfurization equipment (scrubbers) at its coal-fired [Hatfield's Ferry Power Station](#) located near Masontown, Pa.

The project will reduce the plant's sulfur dioxide emissions by approximately 95 percent, or 145,000 tons per year, and significantly lower mercury emissions at the facility.

The current estimated cost of the project is approximately \$550 million, which includes converting all three generating units from forced draft to balanced draft operation to improve plant reliability. The expected completion date is 2009.

"Installing scrubbers at Hatfield is a major step in meeting our commitment to environmental stewardship," said Paul J. Evanson, Chairman, President and Chief Executive Officer of Allegheny Energy. "With our financial turnaround largely complete, we are now moving aggressively to improve our environmental performance. We will have scrubbers on all of our supercritical coal-fired units by 2009, giving Allegheny one of the cleanest coal fleets in the nation. Environmental stewardship is one of the company's top priorities."

The Hatfield's Ferry project will create approximately 350 initial construction jobs and result in additional full-time positions to operate and maintain the scrubbers at the 1,710-megawatt facility. The project also will enable the company to continue purchasing local coal, preserving regional mining jobs. Additionally, scrubber installation reflects Allegheny's long-term commitment to the plant as an integral portion of the company's generating capacity.

The Hatfield's Ferry Project is part of a comprehensive plan by Allegheny Energy to reduce total sulfur dioxide emissions from its coal-fired plants by more than 250,000 tons compared to 2002 levels and to significantly reduce mercury emissions as a co-benefit.

[A fact sheet on the Hatfield Project is available online.](#)

NewsClip: [Allegheny Energy to Add Emissions Controls at Greene Plant](#)

Links: [\\$600 Million Invested at Keystone Generating to Reduce Air Pollution, Mercury](#)
[Reliant Energy Invests \\$250 Million to Reduce Air Pollution, Mercury at Cheswick](#)
[PPL Invests \\$630 Million in Voluntary Pollution Controls](#)

County By County Breakdown Shows Extent of Abandoned Mine Problem in PA

The Pennsylvania Abandoned Mine Lands Campaign this week released a county by county breakdown of the extent and cost of reclaiming abandoned mines in the 42 counties affected by mine drainage and abandoned mine safety issues across the state.

The new report personalizes the debate over reauthorization of the fee used to finance the federal Abandoned Mine Reclamation Fund by turning the often cited statewide figures of 184,000 acres of abandoned mines and 4,000 miles of abandoned mine polluted streams into something local people can recognize.

The report catalogs the number of abandoned sites and features in each of the counties that need to be reclaimed, totals the acreage involved and estimates the cost of reclaiming those sites using a range of \$8,000 and \$10,000 per acre.

Check your county, you might be surprised to see you have a problem!

[A copy of the report is available online.](#)

Link: [Groups Rally to Support Santorum Bill to Restore Abandoned Mine Funding](#)

Funding for Watershed Specialists Continued for Another 2 Years

The Department of Environmental Protection this week announced the award of more than \$4 million in continued support for 66 conservation district watershed specialist positions throughout Pennsylvania.

The two-year grants, awarded under the original Growing Greener Program, enable conservation districts to plan ahead on watershed restoration and stream improvement projects knowing that funding for these key positions is secure.

Growing Greener now supports watershed specialist positions that cover watersheds in 66 of the Commonwealth's 67 counties and provide technical assistance and coordination of watershed restoration and protection efforts.

Watershed specialists help local groups protect and improve their watersheds; provide expert advice to farmers and landowners for conservation practices; work with DEP regional watershed coordinators on all proposals and projects; and help support local Growing Greener projects in their counties.

The Conservation District Watershed Specialist Program was created in 1999 as part of the original Growing Greener Program proposed by Gov. Ridge and passed by the General Assembly.

Link: [Watershed Specialists Making a Difference](#)

Visit the [Professional Services Directory](#) and [Events Calendar](#)

Chesapeake Bay Foundation Unveils New Website

The [Chesapeake Bay Foundation](#) unveiled a redesigned, more interactive website this week which provides more ways for residents of the Susquehanna and Potomac watersheds to learn about how they can protect the Bay.

Share photos and stories, voice your concerns about the Bay on new blogs, learn about the flora and fauna of the Bay, sign up for hikes, teacher training, student education programs and more.

Visit the Chesapeake Bay Foundation website, in particular the [Pennsylvania webpages](#).

DEP's Cambria Mining Office Featured in Green Building Study



The Department of Environmental Protection's District Mining Office in Cambria County was featured in a newly released study of low-energy, high-performance commercial buildings in the United States.

The study confirmed the green buildings profiled in the study do save energy as designed- 25 to 70 percent lower energy consumption than allowed by code because they used a combination of design features

like innovative combinations of energy technologies such as daylighting, radiant heating, natural ventilation, photovoltaic systems, evaporative cooling, and passive solar strategies.

"Commercial buildings account for 18 percent of total energy consumption in the United States, with lighting and heating being primary energy-consuming activities," said David Rodgers, manager for the DOE's Building Technologies Program. "With this study we've learned how well a sampling of today's model low-energy buildings actually did on meeting their original energy goals. Using this 'baseline,' we can now supply a set of best practices to commercial builders to make future low-energy buildings even more efficient."

The six buildings in the study were the Adam Joseph Lewis Center for Environmental Studies, Oberlin College, Ohio; the Visitor Center at Zion National Park, Springdale, Utah; the Cambria Department of Environmental Protection Office Building, Ebensburg, Pennsylvania; the Philip Merrill Environmental Center, Chesapeake Bay Foundation, Annapolis, Maryland; the Thermal Test Facility, National Renewable Energy Laboratory, Golden, Colorado; and the BigHorn Home Improvement Center, Silverthorne, Colorado.

Key lessons learned from case studies of six high-performance buildings, include:

- Owners provide the main motivation for designing and constructing low-energy buildings;
- Setting measurable energy saving goals at the outset of the project is crucial to realizing low-energy buildings;
- Many decisions about including or not including building features are not motivated by cost;

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- Today's energy-saving technologies can substantially change how buildings perform when they are applied together and properly integrated in the design, installation, and operation of the building;
- An integrated whole-building systems design approach is needed to achieve energy goals;
- Buildings do not always operate as they were designed (e.g., plug loads are often higher than planned, daylighting energy savings might be lower, occupants do not follow energy savings strategies as instructed); and
- Energy performance must be tracked and verified following completion of construction.

"In the United States, new commercial buildings are added to the building stock faster than old buildings are retired," added Rodgers. "Conducting research to evaluate the state-of-the-art in energy-efficient buildings as we know it now puts us in a better position to inform the next generation of low-energy commercial buildings."

This study, along with a network of partners in state government, research, academia, construction, design, and utilities-support DOE's goal to create the technology and knowledge base for marketable zero, energy commercial buildings by 2025.

Zero energy buildings are designed, constructed, and operated to generate the same amount of energy they use each year, resulting in a net-zero energy consumption.

[The full study is available online](#)

NewsClip: [DOE Green Building Study Includes Cambria Office of DEP](#)

Link: [Governor's Green Government Council – Cambria Building Profile](#)

All-Star Baseball Game in Pittsburgh Features Special Recycling Event

Baseball fans at the All-Star game in Pittsburgh did more than watch top athletes play ball – they helped the environment too.

The U.S. Environmental Protection Agency and the City of Pittsburgh encouraged fans to "[recycle on the go](#)" by depositing their cans and bottles in bins in the tailgate area and at other key locations in the stadium area.

"Public venues and events present a great, and largely untapped, opportunity to help the environment through recycling," said EPA Assistant Administrator Susan Bodine. "It is our hope that events like today's All Star Game in Pittsburgh will encourage more Americans to think about 'recycling on the go' and encourage more organizations to start recycling programs in public venues."

Pittsburgh is adopting EPA's "Recycle on the Go" philosophy as part of a comprehensive plan to increase recycling participation in the city. More than 40,000 fans are expected to attend the game and other All Star-related activities. Revenue generated from the collected recyclable material will benefit Pittsburgh youth programs.

According to municipal authorities, Pittsburgh collects about 20,000 tons of recyclable material in an average year, which is below the national average reported by similar cities. Mayor Bob O'Conner is challenging the city to double the city's collection to 40,000 tons—to "make Pittsburgh one of the cleanest, safest cities in America."

EPA's "Recycle on the Go" initiative works with partners like the City of Pittsburgh to encourage people to recycle wherever they go by making recycling easy and convenient.

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EPA is working toward a 35 percent national recycling rate by 2008. Recycling saves energy, conserves resources, reduces the need for new landfills and incinerators, and stimulates the development of green technologies.

[Visit EPA's Recycle on the Go Initiative online.](#)

Tireless Project Contributes to Mayor O'Connor's Redd Up Initiative

The All-Star Game is over, but the Tireless Project continues to Redd Up the Three Rivers. In its fourth season, The Tireless Projects have engaged over 500 volunteers to clean nearly 1,000 tires and 90 tons of debris from our three rivers, and six clean-ups are scheduled in the coming months.

The Tireless Project launched its fourth season in June thanks to the Three Rivers Regatta Foundation, as well as the R.K. Mellon and Laurel Foundations – hosting two clean-ups.

On June 9 at South Side Riverfront Park, approximately fifty volunteers came out to clean three tons of trash and 30 tires from the Monongahela River. On June 10, ten volunteers met at Millvale Riverfront Park to clean one-quarter tons of trash and five tires from the Allegheny River.

Volunteers are invited to stay after each clean-up to celebrate their accomplishment of restoring the riverbank's beauty with a waterfront party complete with food, entertainment. Two clean-ups are planned for July.

- **July 15th** – Duck Hollow, Monongahela River, 10 a.m.-1 .pm., Station Wagon Band.
- **July 31st** – Lawrenceville (meet at CMU Robotics Center under 40th Street Bridge) Allegheny River, 10 a.m.-1 p.m., Band to be announced.

The Tireless Project is a collaborative effort of local non-profit organizations to eliminate waterfront blight on Pittsburgh's three rivers. Principal partners include PA CleanWays of Allegheny County, Inc., Friends of the Riverfront and Three Rivers Rowing Association; supporting partners include the River Cube Project, Venture Outdoors, and the Student Conservation Association.

For more information or to volunteer, email tirelessfridays@hotmail.com or call 412-381-1301.

On-Farm Compost Workshop Set for Wilson College on July 22

On July 22 Wilson College will host a free on-farm composting workshop from 10 a.m. to 12 noon entitled, "Farm-Scale Composting of Food Waste & Manures."

Demonstrations and discussions will emphasize composting of food waste and manures on a medium and large scale, featuring a demonstration of the system used by Wilson College to collect and process food waste from the college dining hall into a useful soil amendment.

Compost testing, worm composting and garden-scale composting principles will be covered, as well as grant opportunities available through the Department of Environmental Protection.

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Examples of various compostable foodservice utensils and containers will also be displayed. This workshop should be applicable to farmers, livestock managers, stable managers, institutional facilities personnel, gardeners, or anyone else who has an interest in recycling organic wastes.

In 2004, Wilson College was awarded a Compost Infrastructure Grant from the DEP Organics Recycling program. Grant money was used to purchase equipment to facilitate labor efficient food waste composting.

Since that time, the Wilson College foodwaste composting program has diverted over 15,000 pounds of food waste from landfills per year. Horse manure compost from the college 70-horse stables is sold to local large scale organic farmers.

The workshop is free and open to the public. Please register by July 19 by contacting Matt Steiman, 717-264-4141 ext. 3247 or sending email to: msteiman@wilson.edu.

Spent Mushroom Substrate Symposium Planned for September

“[Nature and Uses for Spent Mushroom Substrate](#)” is the topic for an international symposium to be held in Concordville, Delaware County, September 17-20.

The symposium will combine the scholarly, interdisciplinary work of scientists, experts from the mushroom industry and others involved in recycling activities who will share their knowledge and experience in working with spent mushroom substrate (SMS).

The preliminary program includes sessions on the nature of SMS, environmental and legal considerations, traditional and new uses of SMS, case studies, product marketing and a field trip to working sites.

“Mushroom farmers dispose of “spent” substrate at the end of each crop,” said Dr. David Beyer of Penn State University. “A variety of uses and constraints for disposing of composted materials confront farmers, as well as a number of opportunities. Mushroom growers, composters, the recycling industry and scientists from many disciplines can expand their contributions by interacting with others who study the uses for and characteristics of SMS.”

Joint sponsors for the symposium include Penn State University, the American Mushroom Institute and the International Society for Mushroom Science. The symposium will be held at the Best Western Concordville Hotel at Route 1 and Route 322 in Concordville, in the heart of southern Chester County, the largest mushroom producing county in the United States.

More information and registration forms are available at the “[Nature and Uses for Spent Mushroom Substrate](#)” [webpage](#) or by calling 202-842-4344.

Water Works Operators Set Annual Conference for August 7-9

The [Water Works Operators' Association](#) will hold its annual conference at the Ramada Inn & Conference Center on August 7 to 9 in State College.

The program offers up to 11 CEH's for certified operators, and includes presentations on treatment and distribution topics as well as hands-on training courses for chlorine residual analyzers and continuously monitoring turbid meters.

More information is available on the [conference page of the WWOAP website](#).

July Issue of EE Connections Newsletter Available From Environmental Ed Center

Pennsylvania Center for Environmental Education



The June issue of [EE Connections newsletter](#) from the [Pennsylvania Center for Environmental Education](#) is now available online.

The highlights from this month's issue include—

General News: The Water Resources Education Network Project, Local Environmental Projects Funded By PECO's Green Region Grant Program, Johnson and Johnson Environmental Excellence Award Earns Visit from Secretary, The Tom Ridge Environmental Center at Presque Isle State Park in Erie is now open, DCNR Appoints New Director of Bureau of State Parks, More than \$70 Million Available for Open Space Conservation and Recreation, Travel the State with "explore PA" on Public TV, Williamsport Company Honored for Environmental Excellence Award, Philadelphia Building Named to 2006 Top 10 Green Projects List, 2006 Envirothon Honors Garnered by Penncrest High School students, Hard to Recycle Collection Event in Pittsburgh July 15 New EPA WaterSense Program Saves Dollars and Makes Sense.

K-12 News: Teacher's Lounge: Expedition Susquehanna, Learning Science Interactives State of the Planet, EE Curriculum Needed for Abitibi Recycling Program, My Environmental Education Evaluation Resource Assistant, New Lesson Book on Global Sustainability.

Higher Education: AAC and U Annual Meeting Call for Proposals, Environmental Communication for Behavior Change Online.

Professional Development: Mine Reclamation/Mine Drainage Conference, Pittsburgh to Host National "Greening of Historic Properties" Summit.

Grants/Awards: DEP Soliciting Proposals for Recycling Market Development Grants Do Something BRICK Awards, Groundwater Foundation Awards, Toshiba America Foundation Grants.

To get your own copy, send an email to: info@pcee.org or visit the [EE Connections sign-up webpage](#).

Ned Smith Center Hosts Annual Nature and Arts Festival July 28-29

The [Ned Smith Center for Nature and Arts](#) will hold its annual festival in Millersburg, Dauphin County on July 28-29.

View exhibits and take part in more than 40 programs, workshops, and demonstrations for the entire family. Learn about insects, owls, hawks, edible plants, nature photography, fly-tying, Native



American artifacts, the Susquehanna River and much more.

Visit the [Ned Smith Center Nature and Arts Festival webpage](#) for a listing of activities and programs.

See & Hear

Take an Online Video Tour of the Tom Ridge Environmental Center, Erie



You can take an [online video tour](#) of the [Tom Ridge Environmental Center](#) on Presque Isle, Erie County, courtesy of Keystone-Xtra.

Harry Leslie, Operations Manager for Presque Isle State Park, will take you on a step by step tour of the exhibits, educational features and even the 150 foot tall observation tower at the Center that affords a sweeping view of the peninsula, Lake Erie, Presque Isle Bay and

the City of Erie.

In addition to offering a variety of environmental education experiences, the Tom Ridge Environmental Center is also a [green building using green techniques](#) that reduce energy and water use.

[Take your online video tour today!](#)

See & Hear

Join Students on the Susquehanna Expedition Through Online Video

High School students on the four week expedition down the Susquehanna shared their experience through blogs and photos, now you can [watch video clips](#) as well online.

Visit the triumphant end to their journey by going to the [Susquehanna Expedition website](#) in the coming week.

Environmental Heritage

Karl Mason Profiled in Pennsylvania Heritage Magazine



Karl Mason, Pennsylvania's first state environmental administrator, was the subject of a 4-page profile in the summer issue of *Pennsylvania Heritage* magazine published by the Pennsylvania Historical and Museum Commission.

Karl Mason served as Pennsylvania's first State Environmental Administrator from 1952 to 1966. His holistic vision of environmental management set the pattern for the state that embraces all essential elements of the problems of air, water and land related waste disposal and community environmental protection. The

general framework established by Mason serves as the foundation for Pennsylvania's environmental protection programs to this day.

The article in *Pennsylvania Heritage* is part of the Karl Mason Conservation Heritage Project at the Pennsylvania Historical and Museum Commission that began in October 2005. Dr. Vagel Keller, the author, joined the project to conduct research into the contributions Mason made to conservation efforts in Pennsylvania.

The Project is funded by the [Pennsylvania Association of Environmental Professionals](#) and the family of the late conservation pioneer and administered by the Pennsylvania Heritage Society.

PAEP pays tribute to Karl Mason's legacy annually through its [Karl Mason Award](#) which recognizes a person, organization or project that has made a significant contribution to the betterment of Pennsylvania's environment.

Link: [Profile- Karl Mason 1915-1966, Pennsylvania Heritage Magazine](#)

Feature

Natural Challenges Confront Elk Calf Study Team

By Joe Kosack

Wildlife Conservation Education Specialist
Pennsylvania Game Commission



Game Commission Photo

The piercing buzz that radiated from the rankled timber rattlesnake's tail quickly persuaded Jon DeBerti, Pennsylvania Game Commission biologist, to stop searching for elk calves. The snake was close. So were the other two rattlers that immediately joined the first in announcing their presence to the biologist.

"Even if you never let your guard down, you'll still probably get within a few steps of a rattler at some point during our calving season searches," DeBerti said. "Rattlers and

elk seem to share some similar habitat interests, and given the amount of territory we cover, we can't help but to have some chance encounters. As a general rule, rattlers try to slip away undetected. But if you surprise them, or get too close, they will let you know."

The solution to any close call with a rattlesnake is to keep your cool, locate the snake - or snakes - and depart in a direction that allows you to stay as far away from the snake as possible. In this instance, DeBerti slowly backtracked from his uncomfortable post and resumed searching for the elk calf.

Rattlers had been popping up almost daily on the agency's elk calf searches, which were conducted from the last week in May through the third week of June as part of a

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three-year elk calf study that intends to provide biologists with more details on and insight into elk calf movements and dispersal, habitat usage and survival. The study's findings are expected to improve the management and understanding of Pennsylvania's elk herd, which is America's oldest free-ranging wapiti population east of the Mississippi River.

The research effort starts annually by placing telemetry collars on newborn to five-day old elk calves, which are born mostly from late-May through mid-June. Calves older than five days usually are capable of distancing themselves from pursuers. Since the window of opportunity for collaring calves is limited, the agency's search team works long hours and covers a tremendous amount of territory to place electronic telemetry collars and ear tags on up to 20 calves. Ticks and deer flies are a frequent aggravation for searchers, as are rugged terrain and hot, humid conditions. Oh, and did we mention the rattlesnakes?

In 2005, the elk search team captured and collared 22 calves; their average weight at the time of capture was 42 pounds. Two of the 22 would eventually die, one from unknown causes, the other was legally taken by a licensed elk hunter. The harvested elk weighed 160 pounds (estimated live weight) according to the scale at the check station.

Calves grow fast, about two pounds a day, so the collars used in the study are expandable. They also incorporate a break-away design that eliminates their host's obligation to carry the collar beyond about two years. The transmitters emit a signal for about 18 months, so long as the calf breathes. If a calf doesn't move for four hours, the transmitter will produce a mortality signal.

A cow that reluctantly moves when field personnel approach often has a calf nearby.

Sometimes, the hunt for calves becomes more of a chase, especially if the calf is more than a few days old. Of course, runners are never really appreciated by searchers, because calves can be fleet-footed and relatively uncatchable after their first week. Searchers prefer those calves that rely on the "hider defense," an inherent reaction that compels the calf to lay motionless in a fetal position - head tight to the ground - to avoid detection.

"Many calves instinctively lay motionless on our approach, often even after we touch them," DeBerti pointed out. "This is their only defense against predators at this stage in their life, unless the cow intervenes on the elk calf's behalf. It can be bad news for a calf if a black bear, bobcat or coyote finds it, because the 'hider defense' leaves the young elk face-to-face with a predator if the tactic fails.

"Elk cows, however, are very protective of their calves, and generally stay within 100 yards of them during the first few days of their lives. The cow elk represents a serious obstacle to any predator - or a bull elk for that matter - that approaches her calf. This year, we had a cow elk force an officer back to her vehicle several times as she tried to check an area for a calf."

Elk cows understandably become more anxious when their calf is captured. The calf's yells or "bleats" during its processing - in which it receives a telemetry collar, ear tag and health check - usually draw the cow into closer range. But if there's more than one person involved in the undertaking, the cow usually keeps her distance. Most cows initially leave and cautiously circle back in cover.

Elk survey team members track and observe pregnant cows to determine where to search for calves. Daily drive-bys are used to monitor developments. When it appears a cow elk has birthed a calf, the team moves in.

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An elk cow with a newborn calf on the ground tends to linger in an area nervously when a truck or searchers approach, rather than move on. Elk normally move some distance from day to day, and when they don't, the team makes note and moves in to search the area for a calf. Less than one percent of cow elk birth twins.

"Elk calves are not physically capable of moving any great distance for their first few days, but it wouldn't exactly be advantageous for them to do so even if they could," explained Tony Ross, Northcentral Region wildlife management supervisor. "So they lay flat and motionless. They get up to nurse and stretch. Otherwise, they lay low, but not in locations selected by the cow. Rather, wherever their limited movements take them."

Researchers believe elk cows are more protective of calves than white-tailed deer are of fawns. In fact, it's likely that the availability of whitetail fawns offsets the loss of elk calves to predators. A recent fawn survival study in Pennsylvania concluded predators took about 22 percent of collared fawns on two study areas; mortality was greatest in the Quehanna Wild Area, which also is where some of the elk calf telemetry work is occurring.

"In many western states, black bears have taken a toll on elk calves," DeBerti said. "They actually learned to hunt them out there. Since our elk range has spilled into other parts of the state from natural expansion and trap-and-transfer, we believe it's beneficial to the elk program to keep tabs on calf mortality. Over the past 10 years, the area elk inhabit in Pennsylvania has grown from several hundred square miles to more than 1,000.

"We'd like to determine if elk are more susceptible to predators or other mortality factors in the new areas they inhabit. We know plenty about elk in southwestern Elk and western Cameron counties, where elk have existed for more than 80 years since they were reintroduced. But, we are trying to learn more about the new populations in northern Clearfield, western Clinton, and southern Cameron counties. Elk are such an invaluable resource to Pennsylvania that we simply can't assume changes in elk survival didn't or won't occur in these new areas, especially when bear densities on portions of the new elk range are some of the highest in the state."

The Game Commission last performed elk calf survival field studies in the mid 1990s. During the four-year study, which started in 1993, 30 calves were monitored; 71 percent of the collared calves survived their first year. The ongoing fieldwork is attempting to collar up to 90 calves over three years. Pennsylvania's elk population has doubled in size over the past decade and now numbers 600 to 700, excluding whatever calf recruitment occurred this year.

"We plan to follow these study elk throughout their lives to get better information on the survival of calves and yearling elk to improve our elk population modeling, which is used to determine herd growth," Ross said. "We are convinced we're missing a significant number of yearlings in field counts, or we don't have a good handle on yearling survival. Brain-worm appears to be most prevalent in yearlings, and it is possible there's more brain-worm mortality than we've been able to ascertain. Time and telemetry will tell."

The wild elk inhabiting Pennsylvania today are descendents of 24 released in Cameron County in 1915, and 10 released in Elk County between 1924 and 1926. A total of 177 elk - mostly from Yellowstone National Park - were released in seven counties from 1913 to 1926, and served as a breeding base for what was hoped would develop into a population that could sustain hunting.

But things didn't work out. Although hunting seasons were provided from 1923 to 1931, and some bull elk were taken by hunters, the animals quickly disappeared from almost everywhere but Elk and Cameron counties, which was, coincidentally, where the state's last elk holed up before the species became extirpated in Pennsylvania around the time of the Civil War.

Elk were found throughout Pennsylvania prior to its colonization. Their numbers declined as civilization advanced, mostly as a result of deforestation and unregulated and commercial hunting. Elk were scarce in most areas by the beginning of the 1800s. They were protected in the Commonwealth from 1932 until the state held its first modern elk hunt in 2001.

For more information on Pennsylvania elk, visit the [Game Commission's elk webpage](#).

Quick Clips

Here's a selection of NewsClips on environmental topics from around the state.



Of Special Note...

[The Greening of America – Newsweek Cover Story](#)

[Wet Conditions Breed More Mosquitoes, West Nile Danger](#)

[Senators Say DEP Distorts Lancaster County Air Improvement](#)

[PNC Skyscraper to be Largest Green Building in U.S.](#)

[Two Conservancies Merge Programs](#)

[Springfield Voters to Decide Open Space Borrowing](#)

[Northampton Open Space Funding Open for Debate](#)

[Adams County Commissioner Pitches Plan to Save Farmland](#)

[Lehigh County Considering Property Tax Freeze Program](#)

[State Fast Tracks Canonsburg Site for Redevelopment](#)

[Local Youths Keep Streams Clean in Berks](#)

[Alt on Hunting: I Love this Sport](#)

[Munching Millions Ravage Forest Land](#)

[Buying Into Biofuels](#)

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[Sheetz Store in Pleasant Hills First to Offer Ethanol-Based Fuel](#)

[Greene County Small Wind Energy Project Announced](#)

[State Launches Wind Energy Project in Beaver County](#)

[Wind Turbine Will Be Erected at Lanchester Landfill](#)

[Sheetz Becomes PA's First Chain to Provide E85 Ethanol-Based Fuel](#)

[Editorial: Ethanol May Not Be Panacea](#)

[State Might Retreat on Heating-Aid Program](#)

[Tenants Set for Corning Brownfield Site](#)

Watershed NewsClips

Read a sampling of NewsClips on watershed topics from around Pennsylvania.

[Mine Water Cleanup Aids Farmers](#)

[Watershed Groups Aid DEP in Mine Drainage Cleanup](#)

[Watershed Group Notes Successes](#)

[Fish Transmitters to Help Track Environmental Health of Presque Isle Bay](#)

[What's a 100-Year Flood?](#)

[Rain Gardens Helps Control Pollution from Runoff](#)

[Toby Creek, Luzerne County, Needs Major Work](#)

[No Stopping River's Rage, Move Up or Out](#)

[Planting Trees Preventive Medicine for Flooding](#)

[Quemahoning Classic](#)

[Biologists Take Closer Look at River Dredging](#)

[Editorial: We Must Use Response to Flooding as Learning Tool](#)

[Sojourn Participants Enjoy Allegheny River](#)

[Sojourns Take Planning](#)

[Naturalist Joins Sojourn](#)

[Study Aims to Maintain Creek](#)

[Schroder: Erosion Rules Need to Be Strengthened](#)

[Schuylkill River Hosts Upward Bound Students](#)

Special Series by the Lock Haven Express--

[Susquehanna River on Road to Recovery](#)

[Volunteer Efforts Improve River Water Quality](#)

[Rivers Are Safe Places for Adventurers](#)

[Fish Returning to the West Branch of the Susquehanna River](#)

Regulations

No new regulations were published this week. [Pennsylvania Bulletin – July 15, 2006](#)

Comment Deadlines: [Technical Guidance \(DEP website\)](#)

[Copies of Proposed Regulations \(DEP website\)](#)

[Status of Regulations, 6-Month Calendar \(DEP website\)](#)

Technical Guidance & Permits

Several notices were published related to general permits for crematories, Pennsylvania's State Programmatic Permit, organizations certified for radon testing and a reorganization of the Department of Conservation and Natural Resources. Here are the details....

PA Environment Digest – Holston & Crisci

The Department of Environmental Protection [published a notice of availability](#) of the Final General Plan Approval/Operating Permit for Human or Animal Crematories.

DEP published a notice of [Corps of Engineers certification](#) of Pennsylvania's State Programmatic General Permit.

DEP published a notice updating its list of organizations certified to perform radon testing. ([PA Bulletin page 3723](#))

The Executive Board published a [notice on the reorganization](#) of the Department of Conservation and Natural Resources.

[For copies of Draft Technical Guidance \(DEP website\)](#)

[For copies of Final Technical Guidance \(DEP website\)](#)

Calendar of Upcoming Events

Upcoming conferences, meetings, workshops, plus links to other online calendars. Meetings are in Harrisburg unless otherwise noted. [Go To: PA Environment Digest Calendar Page](#)

- **July 18** – **CANCELLED**. Environmental Quality Board meeting. Room 105 Rachel Carson Building. 9:00.
- **July 19** – [Governor's Invasive Species Council](#) meeting. Agriculture Building, 2301 N. Cameron St., Harrisburg.
- **July 19** – [Delaware River Basin Commission meeting/hearing](#). West Trenton, NJ.
- **July 25** – **CANCELLED**. [DEP Stormwater Manual Oversight Committee](#) meeting. Room 105 Rachel Carson Building. 10:00. Next scheduled meeting is August 29.
- **August 22** – House Local Government Committee public hearing on [House Bill 2564](#) (Maitland-R-Franklin) amending the Municipalities Planning Code to provide for local impact fees. Chambersburg Administration Building. 10:00.
- **August 29** – **CANCELLED**. State Board for Certification of Water and Wastewater Systems Operators conference call.
- **September 13** – [DEP Water Resources Advisory Committee](#) meeting. Room 105 Rachel Carson Building. 9:30.
- **September 19-20** – [State Board for Certification of Water and Wastewater Systems Operators](#). 10th Floor Rachel Carson Building. 10:00 and 8:30 respectively.
- **October 31-November 5** – [National Historic Preservation Conference](#). National Trust for Historic Preservation. Pittsburgh.

[DEP Calendar of Events](#)

[Watershed Events](#) (*courtesy [PA Organizations for Watersheds & Rivers](#)*)

[Environmental Education Workshop/Training Calendar](#)

(*courtesy [PA Center for Environmental Education](#)*)

[Senate Committee Schedule](#) [House Committee Schedule](#)

Helpful Web Links

[Daily NewsClips](#) [Daily DEP Update](#) [GreenTreks Network](#) [Watershed Weekly](#)

[DEP Press Releases](#) [DEP Advisory Committee Meetings & Agendas](#)

[DCNR Resource Magazine](#) [DCNR Press Releases](#)

[Fish & Boat Commission Press Releases](#) [Game Commission Press Releases](#)

Stories Invited

Send your stories about environmental issues, programs and positive actions to **PA Environment Digest** - DHess@HolstonCrisci.com or go to www.PaEnvironmentDigest.com .

PA Environment Digest is edited by David E. Hess, former Secretary Pennsylvania Department of Environmental Protection, and is published as a service to the clients of Holston & Crisci and the public. Holston & Crisci is a Harrisburg-based government and public affairs firm whose clients include Fortune 500 companies and non-profit organizations. For more information on Holston & Crisci call 717-234-1716.

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Visit the [Professional Services Directory](#) and [Events Calendar](#)