– PA ——— Environment Digest

An Update on Environmental Issues in Pennsylvania

Edited By David E. Hess, Holston & Crisci **June 20, 2005**

Enviro. Ed, Biodiversity, Dramatic Recycling Results, Growing Pollution Controls

This week's *Digest* is filled with great stories of environmental successes that you can copy.

Learn about innovative environmental education in Armstrong County.

How did the City of Philadelphia, one of the toughest places to recycle, triple the amount of recyclables they collect in a new pilot program?

What are nonprofit groups and agencies doing to protect aquatic diversity in Pennsylvania?

Learn how you might be able to grow pollution controls on farms from the Chesapeake Bay Foundation.

With only 8 voting days left to work on the state budget, there hasn't been much discussion of legislation to implement the Growing Greener bond issue.

Know Where This Sandy Path Leads in PA? *(Answer on Stories Invited Page)*

Budget Clock Ticking

• 8 voting days are scheduled through the June 30 budget deadline in the House
• 8 voting days in the Senate

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On the Hill

On the Senate, House Agenda

Senate and House have a variety of bills on their agendas for this week. Here's a quick rundown--

In the Senate

Senate Calendar: The Senate will start the week with these items of interest on the Calendar— legislation establishing the PA Center for Environmental Education in law (Senate Bill 410), extending the sunset date for the small heating oil storage tank cleanup program (Senate Bill 722), providing a sales and use tax exclusion for appliances meeting the energy star requirements (Senate Bill 266), establishing a tax credit for historic properties (Senate Bill 571) and extinguishing utility and other liens on donated property (Senate Bill 639)

In Committee: The Senate Local Government Committee is set to consider legislation authorizing local governments to preserve open space through the waiver of certain

service fee and a bill specifically authorizing local government funding of watershed associations, the Senate Appropriations Committee will consider legislation to toughen landfill permit requirements and make changes to the Agricultural Security Law.

In the House

House Calendar: The House starts the week several environmental bills on the Calendar-- electronic titling of vehicles that attracted a proposed vehicle emission inspection amendment (House Bill 1014) and resolutions encouraging Congress to earmark more funds for state storage tank regulatory programs (House Resolution 326) and establishing a sewage management issues task force (House Resolution 88).

In Committee: the Agriculture Committee will again try to consider legislation establishing an Agricultural Review Board (the Administration's ACRE proposal).

Senate and House Bills Moving

Tank Program Funding: Senate Resolution 125 (MJ White, Musto) that encouraging the federal government to earmark more funds to state storage tank regulatory program to help avoid a state tank registration fee increase, passed the Senate unanimously.

Scenic Byway: Senate Bill 721 (Lemmond-R-Luzerne) designating a portion of Route 6 in Wyoming County and Route 92 in Susquehanna County a scenic byway was passed by the Senate.

Tank Cleanup Program: Senate Bill 722 (Musto-D-Luzerne) extending the sunset date on the small heating oil tank cleanup program was reported from Senate Appropriations after a technical amendment and is now on the Senate Calendar.

Environmental Education: Senate Bill 410 (MJ White-R-Venango) creating the PA Center for Environmental Education in law was amended and is on the Senate Calendar.

Infrastructure Security Projects: House Bill 612 (Rubley-R-Chester) authorizing funding for water and sewage system security projects was referred to Senate Appropriations.

Ag Security Areas: House Bill 619 (Hershey-R-Chester) expanding the Agricultural Area Security Law to include horse training and stabling areas and Senate Bill 723 (Wenger-R-Lancaster) further defining how nonprofit entities could be involved in agricultural land preservation were referred to Senate Appropriations.

Energy Assistance: Senate Bill 12 (Tomlinson-R-Bucks) expanding the energy assistance program was referred to Senate Appropriations.

ACRE Postponed: The House Agriculture Committee rescheduled consideration of House Bill 1646 (Hershey-R-Chester) that establishes an Agricultural Review Board (the Administration's ACRE proposal) until on June 22.

House Environment Committee Reports Lateral Funding, Tank, Composting Bills

The House Environmental Resources & Energy Committee this week reported out legislation that would fund water and drinking water lateral connections, provide a credit for animal composting and resolutions urging more federal money be earmarked to states for storage tank regulation and creating a sewage issues task force. Here are the details—

Funding Laterals: House Bill 1108 (Rubley-R-Chester) providing loans and grants for water and waste water laterals was amended to cap the program at $15 million;

Animal Composting: House Bill 1413 (Caltagirone-D-Berks) establishing a tax credit for qualified animal recycling facilities and limited tax exemptions;

Federal Tank Funding: House Resolution 326 (Adolph-R, George-D) urging Congress to release more funds to states for storage tank administration; and

Sewage Task Force: House Resolution 88 (Hutchinson-R-Venango) establishing a sewage management issues task force.

New State Senator Will Serve on Environmental Resources Committee

The newest member of the state Senate – Sen. Wayne Fontana (D-Allegheny) will serve on the Environmental Resources and Energy Committee replacing Sen. Costa (D-Allegheny).

In Other News

Pennsylvania Celebrates 300,000 Acres of Preserved Farmland

Overlooking a beautiful view of open space and productive farmland in Lancaster County, Agriculture Secretary Dennis Wolff this week celebrated Pennsylvania's milestone of preserving 300,000 acres of farmland.

Wolff joined members of the state's Farmland Preservation Board, local officials and farmers at the preserved farm of Luke Brubaker in Mt. Joy.

"Pennsylvania is the leader in farmland preservation, and we're excited to celebrate this milestone of preserving 300,000 acres," said Wolff. "Agriculture is critically important to the economy and heritage of Pennsylvania. Without our farms and farmland, we can't continue to produce food and fiber for the people of Pennsylvania and around the world."

Wolff chaired the state Farmland Preservation Board meeting earlier in the day when 33 farms, representing 3,031 acres, were approved for the program. With today's additions, the state program has preserved 304,151 acres and 2,651 farms.

The farms approved by the Board represent 15 counties: Berks, Butler, Carbon, Centre, Cumberland, Erie, Franklin, Juniata, Lancaster, Lycoming, Monroe, Montgomery, Northampton, Tioga and York. Fifty-five of Pennsylvania's 67 counties are enrolled in the program.

"Pennsylvania has 7.7 million acres of farmland, representing 27 percent of the state's land base," said Wolff. "With agriculture contributing $45 billion to the economy, we must continue to preserve our farms and open space."

Preserved farmland also provides tax-savings for Pennsylvania residents. In a 'Cost of Community Services Study' by the American Farmland Trust, research shows that for every dollar a farm family pays in property taxes, it only uses 36 cents in public services. On the other hand, for every dollar invested by residential areas, $1.16 is required in services.

Pennsylvania's Agricultural Conservation Easement Purchase Program was developed in 1988 to slow the loss of farmland to development. The program enables state, county and local governments to purchase conservation easements (also known as development rights) from owners of quality farmland.

For more information, visit the State Farmland Preservation Program webpage or call 717-783-3167.

Philadelphia/RecycleBank Triple Recycling in Pilot Areas

Rep. Scott Hutchinson, Chair, Patrick Fitzgerald, RecycleBank, Sen. Ray Musto, Vice Chairman

Representatives of RecycleBank and the City of Philadelphia Recycling Office told the Joint Legislative Air and Water Pollution Control and Conservation Committee their new program to provide residents with incentives to recycle has tripled both the amount of recyclables collected and the participation rate in pilot areas of the City.

The new Philadelphia recycling program provides residents with up to $25 per month in coupons they can convert to real dollars and spend with participating sponsors or donate them to nonprofit groups.

"We went from collecting 9 pounds of recyclables per house per week to an average of 30 pounds of recyclables," said Patrick Fitzgerald, co-founder of RecycleBank, a for-profit recycling management firm based in Philadelphia. "And our participation rates went from 30 percent to 90 percent."

"We were able to build partnerships with Coca-Cola, Acme, Staples, Starbucks, TLA Video and local businesses to participate in the program," said Ron Gonen, RecycleBank's other co-founder. "For them it's a marketing opportunity, for residents participating in our program, it's a reward for doing something good-- recycling."

David Robinson, Recycling Coordinator for the City, said they were leery of the concept at first.

"We weren't sure at first how people would respond to the program and how clean the material would be," said Robinson. "What we found is people are call up our

enforcement officers and asking what they can put in the recycling containers. They're really careful about what they recycle because the more they recycle the more it benefits them."

Under the program, each household receives a new 32 gallon recycling container with recycling instructions right on the lid. All the recyclables—plastics, glass, metal, newspapers, bond paper and cardboard – go into the same container making it convenient. (In recycling lingo this is known as single-stream recycling.)

The other partner in the program -- Blue Mountain Recycling – does the job of sorting and marketing the material through their existing contract with Smurfit-Stone.

RecycleBank makes its money only if the program increases recycling. They will get a percentage of the landfill fees the City avoids paying since it does not have to send the extra recyclables they collect to a landfill or incinerator.

The program is becoming so popular, RecycleBank is now in discussions with Abington Township, Montgomery County, the City of Baltimore, the state of Delaware and other areas to start programs in their area.

RecycleBank is also starting a new program in several schools this fall to provide not only savings for the schools involved, but also an educational lesson for students.

"A school-wide recycling program will save on waste disposal costs and each student gets his or her own account as their share of the recycling effort," said Gonen. "They learn what working together accomplishes."

Committee chairman Rep. Scott Hutchinson (R-Venango) said this kind of recycling program could serve as a model for communities across the state.

For more information visit the Recycling Pays Program and RecycleBank websites.

NewsClip: Recycling Rewards Come to West Oak Lane

PennFuture Calls for DEP to Adopt Maximum Protection for Mercury

Citizens for Pennsylvania's Future (PennFuture) this week filed its response to the Department of Environmental Protection asking DEP to adopt regulations to reduce mercury emissions from the state's power plants by 90 percent.

This filing is part of PennFuture's August, 2004 request for rulemaking on mercury, which DEP agreed to in principle in a letter issued on May 18, the same day the state joined with other states in suing the federal government for its failure to protect the public's health from mercury.

"DEP should not be timid," said Jan Jarrett, vice-president of PennFuture. "The lives and health of our children are at stake. We want specific policies that will reduce toxic mercury by 90 percent from our power plants. If New Jersey can do it, so can Pennsylvania."

"The first step to recovery is admitting that Pennsylvania has a problem, and DEP agrees with us about that," said Charles McPhedran, senior attorney at PennFuture. "The technology is available to cut mercury pollution and protect our children from mercury poisoning. Now, we need DEP to tell our power plants to take it off the shelf and put it on their smokestacks."

PennFuture's June 16 response said while DEP accurately described the health and environmental problems, it disagreed with the agency's rejection of New Jersey recommendations as a model for a Pennsylvania rule.

Instead, PennFuture recommended a rule based on these five principles—

- applies to coal-fired boilers as defined in the suggested regulatory language submitted with the petition, not having less stringent standards for existing coal-fired and coal waste fired power plants;
- requires at least 90 percent mercury control efficiency from all subject new and existing sources, including maximum possible reductions from existing plants, consistent with the standards in the suggested regulatory language;
- does not allow trading between plants (where PennFuture agrees with DEP);
- focuses on emission reductions without promoting any specific type of coal; and
- requires 90 percent control efficiency by three years from issuance of the final DEP rule.

In 2001, the Keystone plant in Shelocta (Armstrong County) had the highest releases of mercury and mercury compounds to the air of any electric utility plant in the country. In 2002, Pennsylvania utilities were third in the nation with 6,986 pounds of mercury and mercury compounds emitted into the air.

In addition to its health and environmental effects, mercury contamination of Pennsylvania fish also has negative impacts for our fishing industry, which a report by the Department of Conservation and Natural Resources estimates has a direct economic impact of $800 million each year.

In August, 2004, PennFuture was joined by health care professionals, other environmental organizations and labor, sporting and women's rights groups in filing a petition with DEP asking the state to require power plants to reduce their mercury emissions by 90 percent by 2007. Since that time, the list of co-petitioners has grown to 50 including a number of faith-based organizations.

Documents from both DEP and PennFuture are available online.

Electric generators, business, coal and labor groups have made several points in response to the proposal that Pennsylvania go on its own to adopt a mercury rule, rather than being part of a national mercury reduction program the U.S. Environmental Protection Agency is adopting—

Level Playing Field: Electricity generation now operates in a competitive market. Subjecting generators in Pennsylvania to a different system for regulating mercury would increase their costs not only resulting in higher electricity prices, but putting them at a competitive disadvantage to other generators in the region.

One standard covering all generators with a cap and trade program to help achieve compliance at the lowest possible cost would eliminate the competitive disadvantage of a Pennsylvania-only standard.

Electric Reliability: A Pennsylvania-only standard on a plant by plant basis would mean older, smaller coal-fired generating plants would have to be closed resulting in a loss of generating capacity, jobs and potentially creating reliability problems. One estimate is up to 25 percent of the coal-fired generating capacity in Pennsylvania would have to close.

Impact on Coal Industry: While there is a concern that a uniform federal mercury standard would benefit coal from the western U.S. more than eastern coal, that impact is

orders of magnitude smaller than the impact of a Pennsylvania-only mercury standard on the coal industry and related power plant jobs. Closing 25 percent of the coal-fired generating capacity would mean losing a market for millions of tons of Pennsylvania coal.

Mercury Is a Worldwide Problem: 70 percent of mercury emissions from U.S. generating facilities are not deposited within the continental United States, but are dispersed globally. 75 percent of the mercury deposited in the U.S. is from other countries and continents. Only 7 percent of mercury depositions are known to be from air deposition.

No "Hot-spots:" There is no evidence that power plant mercury emissions create "hotspots" around the facilities. EPA and independent researchers have looked extensively at the data on this issue and could find no substantiation for this claim.

No Cap and Trade a Disadvantage: The cap and trade system for controlling nitrogen oxide and sulfur dioxide emissions resulted in achieving compliance with tough standards at the minimum possible cost. Without the ability to create and sell mercury emission credits, financing the controls needed to meet a plant specific mercury standard would be very expensive. In fact, some utilities already have made plans to generate credits and these investments would be in jeopardy.

DEP has not yet indicated how it will develop its own mercury proposal—through existing advisory committees or a special stakeholder group.

For more information visit the Electric Power Generation Association webpage.

Chesapeake Bay Commission Hosts Legacy Sediments Presentation

Pennsylvania members of the Chesapeake Bay Commission sponsored a presentation this week on how legacy sediments—sediments left over from thousands of mill dams – are having a significant impact on sediment and nutrient loading in the Chesapeake Bay.

Sen. Waugh (R-York), who serves as chair of the Pennsylvania delegation to the Commission, along with members Rep. Zug (R-Lebanon) and Sen. Wenger (R-Lancaster) joined members of farm organizations, legislative staff and other guests to hear about the problem.

Franklin & Marshall College professors Dr. Robert Walter and Dr. Dorothy Merritts said more than 65,000 grist mills and small dams dotted streams all over the east coast, more than 600 in Lancaster County alone.

Sediments trapped behind these dams – from 4 to 12 feet deep accumulated over the years before dams were breached or otherwise disappeared. These sediments are now being eroded by the streams and carried to the Chesapeake Bay causing both sediment problems and carrying nutrients like phosphorus and nitrogen with them.

Wade Oberholtzer, P.E. from LandStudies, Inc. noted that 50 to 90 percent of the sediment load generated in a watershed is not coming from overland flow as previously thought, but from the stream channel banks themselves, according to actual measurements.

The policy impact of this more thorough understanding of the role stream channel erosion plays today in sediment and nutrient loading is two-fold:

Programs such as Chesapeake Bay nutrient reduction strategies, modeling work done for water quality credit trading programs, the proposed Stormwater Management

Manual, the Generalized Watershed Loading Function Model and TMDL planning that assign relative weights to pollution sources may need to be updated.

At worst, underestimating stream channel erosion in some areas may result in improper burdens being placed on agriculture or other sources of non-point and point pollution to cleanup their contributions to a stream's pollution problem.

Evaluating potential remedies for water pollution problems involving restoration, particularly in more developed areas, should include floodplain restoration, if these results hold.

Oberholtzer said thought should be given to developing a specific floodplain restoration best management practice.

Franklin and Marshall will be sponsoring a special two-day workshop on the legacy sediments issue on September 12 and 13.

For more information visit the Legacy Sediments webpage.

PEC Endorses Peterson Bill to Accelerate Cleanup of Abandoned Mines

The Pennsylvania Environmental Council is endorsing a bill introduced by U.S. Congressman John Peterson (R-PA/5) that would reauthorize the Abandoned Mine Lands (AML) program and speed up the reclamation of thousands of hazardous abandoned coal mines across the country. Peterson was joined by a bipartisan coalition of 16 House Members from Pennsylvania, Ohio, Tennessee and Maryland.

"The Peterson Bill is especially important for Pennsylvania and presents an opportunity to refocus the AML program on its original intention – to clean up abandoned coal mines," stated Andrew McElwaine, President and CEO of the Pennsylvania Environmental Council. "We look forward to working with Congressman Peterson and the Pennsylvania Congressional delegation to speed up Pennsylvania's reclamation efforts. This bill will place funds where they need to be for those states that face the health, security and environmental challenges posed by abandoned mines everyday."

Peterson's bill will enable the clean up of Pennsylvania's AML sites in as little as 25 years, as opposed to 50-60 years under the current program, while reducing the hazards of abandoned coal mines left over from decades of coal mining. Abandoned mines encompass more than 189,000 acres in 44 of Pennsylvania's 67 counties, and more than 3000 miles of streams are polluted by acid mine drainage. At least 40 people have been killed and many more injured at abandoned mines in Pennsylvania alone over the past 15 years.

Competing with the Peterson bill is the Cubin-Rahall bill, introduced by Barbara Cubin (R-WY) that would leave Pennsylvania with nearly $600 million in cleanup remaining, while giving Wyoming over $1 billion for "rainy day" projects such as construction and road paving.

Under the current AML program, mine reclamation dollars are raised through a per-ton fee on coal and are allocated to states based on their current level of coal production. As a result, the majority of funds are directed to states like Wyoming which only recently began mining coal as the industry moved west. Since Wyoming has been certified since 1982 to have no abandoned mine problems, the state has used the millions of dollars they receive from the AML program for miscellaneous projects. Consequently,

only 52 percent of AML program funding is currently being used to clean up hazardous abandoned mines.

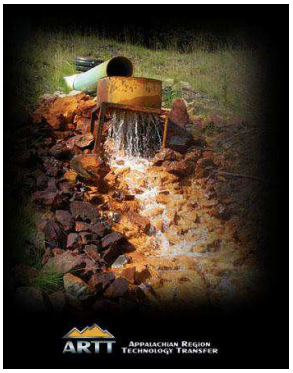
According to an analysis by the U.S. Office of Surface Mining (OSM), Cubin-Rahall would steer more than $1.2 billion in non-reclamation funding to Wyoming over the next 25 years, while leaving a shortfall of more than $1 billion for priority mine reclamation projects in states like Pennsylvania, West Virginia, Kansas and Oklahoma. After 25 years, Pennsylvania would still need $566 million to complete high-priority mine reclamation projects.

Under the Peterson bill, future AML funding would be directed to high-priority areas, providing reclamation dollars to states based on their number of abandoned mines that present a public health and safety risk.

H.R. 2721, the Abandoned Mine Land Reclamation Program Extension and Reform Act of 2005, was officially introduced by Peterson and a bipartisan coalition of House Members on Thursday, May 26th. Senator Arlen Specter has introduced a companion bill in the U.S. Senate.

For more information, visit the AML Campaign website and the Pennsylvania Environmental Council.

Mine Water Treatment Technology Conference Features National Experts



The 2005 Mine Water Treatment Technology Conference will be held in Pittsburgh on August 16-18 featuring presentations by nationally recognized experts on mine water treatment.

The conference is a joint effort of the USDI Office of Surface Mining through its Appalachian Region Technology Transfer group, Eastern PA Coalition for Abandoned Mine Reclamation, Western PA Coalition for Abandoned Mine Reclamation, DEP, Southern Alleghenies Conservancy, Western PA Watershed Program, Kiski-Conemaugh Initiatives, and Canaan Valley Institute.

For more information, visit the Conference webpage or direct questions to bmeans@osmre.gov or luranows@osmre.gov .

Monongahela Mine Pool Study Now Complete

A five-year intensive research study lead by West Virginia University entitled "EPA Region III Mine Pool Project," was completed and is credited in preventing very serious acid mine drainage (AMD) pollution of the Monongahela River.

The $6 million study covered a 30 by 80 mile complex of abandoned mines from Fairmont, W.Va. to Pittsburgh where little was known about mine water movements, interchange between adjacent mine pools, water chemistry, filling rates, and potential overflows.

Objectives included investigating flooding and post-flooding hydrology, hydrogeology, and geochemistry pertinent to long-term impacts on surface water ecosystems, modeling hydrogeological (flow) and geochemical evolution of modern and projected future mine-water discharges; conducting pilot field simulations to define and

quantify technologies and design parameters for in situ treatment of high-iron net-alkaline mine discharges; continue quantifying economic values (both costs and benefits) related to water quality changes (part and potential future) in the Monongahela River; and expand geographic information system support for the project.

The study's predictions aided Pennsylvania in preventing a large AMD overflow from the abandoned Shannopin Mine Pool in 2004 and also set the groundwork for addressing other impending overflows during the next several years.

For more information visit the Mine Pool Project webpage.

Mid-Atlantic Green Highways Initiative Now Underway, Forum Set

On June 2, EPA Region 3 kicked-off the Mid-Atlantic Green Highways Initiative with an executive level planning charrette, attended by a diverse group of government and private sector leaders and innovators.

The group, which included federal and state transportation and environmental executives, as well as representatives and leaders in non-profit groups, trade organizations, and private consultants, came together to develop the vision, scope and definition of the Green Highways or "Sustainable Transportation" Initiative.

A Mid-Atlantic Green Highways Forum is to be held September 26-29, in College Park, Md.

For more information visit the Green Highways Initiative webpage.

Primer: Future Fuel? On the Road to a Hydrogen Economy

It's the most abundant element in the universe, but can it meet Earth's energy needs for the 21st century? For clean, renewable hydrogen to replace oil, some tough hurdles--technological and economic--have to be overcome.

For a quick primer on hydrogen and it potential as the next fuel source, visit a special multimedia report on hydrogen prepared by Penn State's online Research magazine.

2005 Native Plant Conservation Grants Available

The National Fish and Wildlife Foundation is offering grants from the 2005 Native Plant Conservation Initiative, which provides federal dollars to nonprofit organizations and government agencies to promote the conservation of native plants.

The pre-proposal deadline is August 15.

There is a strong preference for "on-the-ground" projects that involve local communities and citizen volunteers in the restoration of native plant communities. Projects that include a pollinator conservation component are also encouraged.

Grants range from $5,000 to $40,000 with an average grant size of $15,000. It is expected that all grant funds will be matched by non-federal contributions from project partners.

Application guidelines are available on the 2005 Native Plant Conservation Initiative webpage.

DCNR Hosts Environmental Careers Camps for Students

The Department of Conservation and Natural Resources this week announced that the first of two summer residential camps for high school students interested in pursuing environmental careers will begin June 19, at Kings Gap Environmental Education and Training center, near Carlisle, Cumberland County.

Instruction will be offered to selected students in grades 9-12, June 19, through June 25, at Kings Gap. A second camp will take place July 17, through July 23, at the Kirby Episcopal House and Chapel, Glen Summit, Luzerne County.

The ultimate goal of the camps is to introduce students to conservation and environmental careers and encourage their pursuit. From stream sampling of fish and aquatic life, to forestry skills, daily activities are planned to get students out in the field to meet and observe environmental professionals.

Participants will take part in activities exposing them to a wide range of career experiences, including water quality assessments, geology field studies and overnight camping experiences. There will be opportunities to meet conservation professionals and learn about career opportunities. The instruction and daily activities will be overseen by specialists and officials from DCNR's bureaus of state parks, forestry and topographic and geologic survey.

After the camps, attendees will have a chance to seek internships, mentoring and job shadowing positions, and return as future camp leaders.

For ECO Camp information, contact Blue Knob State Park, near Imler, Bedford County, at 814-276-3576. The camps are free of charge.

The activities schedule for the Kings Gap-based ECO Camp follows:

- June 19 - Orientation, team building from noon to 5 p.m. at Kings Gap Environmental Education Center, near Carlisle, Cumberland County.
- June 20 - Watershed, aquatic skills, introduction to recreational fishing; 10 a.m. to 8:30 p.m., Pine Grove Furnace State Park, Gardners, Cumberland County.
- June 21- Aquatic studies, turtle basking structure, introduction to birds of prey, historic buildings, fossils; 9 a.m. to 5 p.m.; Little Buffalo State Park, Newport, Perry County, and Shaver's Creek Environmental Center, Petersburg, Huntingdon County.
- June 22 - Aquatic studies, introduction to trout hatchery operations, orienteering, K-9 search and rescue, geology and astronomy; 9:30 a.m. to 9 p.m.; Huntsdale Fish Hatchery and Kings Gap.
- June 23 - Timbering activities, introduction to forestry practices, sawmill operations and camping; lifeguard demonstration; 10 a.m. to 6 p.m.; Pennsylvania State University Mont Alto Campus, Mont Alto, Franklin County and Caledonia State Park, Fayetteville, Franklin County.
- June 24 - Career counseling, canoeing, fishing; from 10:15 a.m. to 8 p.m.; Kings Gap, Gifford Pinchot State Park, Lewisberry, York County.
- June 25 - 11 a.m. to noon, closing ceremonies at Kings Gap.

They Grow Up Fast – Peregrine Falcons Fledged, One Has Health Problems

The Department of Environmental Protection reported this week all three young peregrine falcons took their first flights this week from their nest on the Rachel Carson Building in Harrisburg. On a sad note, one of the falcons has health problems.

On June 13 the blue-banded male fledged. The next morning, the yellow-banded male fledged. The red-banded female took her first flight on Wednesday.

The appearance and behavior of the blue-banded male over the next two days indicated that he might be infected with trichomonas, a protozoan that can be fatal to young peregrines.

On Wednesday afternoon, the blue-banded male landed in a parking garage and was captured and examined, revealing that he suffered from an advanced case of trichomoniasis. He was immediately transported to wildlife rescue for treatment.

In addition to the trichomoniasis, the fledgling was also found to have an injury to the mandible, further complicating his condition. The prognosis for this bird is not good. If he does not respond to treatment, he will have to be euthanized.

That's the bad news.

The good news is, the yellow-banded male and red-banded female are taking short flights and should be getting advanced flight and hunting lessons from the adults soon.

The watch and rescue program should wind down by the end of the week. Watch for continued activity at the ledge as the fledglings get food deliveries and develop the skills that they will need to survive the critical first several months of their new found freedom.

For more information, visit the Falcon webpage.

Game Commissioners Approve Important Wildlife Projects

The Pennsylvania Board of Game Commissioners recently approved three projects that will be funded through the State Wildlife Grants and Landowner Incentive programs for bat research and wetlands preservation.

The research projects will be funded by the federal government under the State Wildlife Grants Program (SWG), while the wetlands conservation project will be financed by the federal government through the Landowner Incentive Program (LIP).

The research projects are as follows:

- **Examination of Bat Mortality at Penobscot Mountain Wind Farm:** This $153,000 project, proposed by East Stroudsburg University, will investigate pre-construction monitoring techniques and post-construction mortality of bats and birds at the proposed Penobscot Mountain Wind Farm in Luzerne County. The 36-turbine wind farm on the Pocono plateau offers a chance to develop much needed pre-construction protocols and assessments of bat activity, measure site-specific changes in bat activity caused by wind farm development, and attempt to correlate biological and environmental variables to the wildlife impacts.
- **Small-Footed Bat Telemetry at Lake Raystown:** This $18,000 project, proposed by Sanders Environmental Inc., will contribute to our understanding of foraging and roosting habitat needs of small-footed bats. Increased understanding of foraging and roosting bats should enhance our ability to successfully manage this threatened species, and decrease dramatically the likelihood of it becoming endangered. Reproductive small-footed bats have been captured during surveys at Lake Raystown. The effort will focus on capturing small-footed bats and tracking them to roost sites, determine nighttime habitat usage and travel patterns.

The LIP wetland project is as follows:

- **Muhlenberg Wetland Project:** This $175,000 project, proposed by the Berks County Conservancy, will protect critical wetlands habitats and several Partners in Flight priority species of birds. The funds will be used to buy conservation easements on critical bog turtle habitat, and to continue the site management plan through vegetative management and general monitoring and assessment. LIP requires a 50-percent funding match, which will be met by the Berks County Conservancy, the landowner and other interested parties.

The research projects are being funded through SWG, a cost-sharing program administered through the U.S. Fish and Wildlife Service's Federal Aid Program. They utilize funding from allocations for Pennsylvania. An advisory group, comprised of Game Commission and Pennsylvania Fish and Boat Commission staff, review and rank projects, and then secure Board of Commissioner approvals for selected projects.

LIP was developed by the U.S. Fish and Wildlife Service to assist private landowners interested in working to conserve and restore the habitat of endangered species and other at risk plants and animals. To be eligible, state fish and wildlife agencies, landowners, or non-profit groups must put up at least 25 percent of the cost of projects.

Visit the State Wildlife Grants Program webpage for more information.

Feature

Environmental Education is Alive and Well in Armstrong County

By Jonathan Szish, School and Community Relations Coordinator

On a dozen field trips this spring, the Crooked Creek Environmental Learning Center has educated more than 700 Armstrong School District students, the most ever in one season for either the school district or the learning center.

Students Francis Danahey, James Armstrong, Curtis Lias, teacher Eric Moyer and student Codi Evans from the Armstrong School District built this 5.5 foot wooden tree to show off donors' names to the Environmental Learning Center.

The record numbers reflect a growing partnership between the Armstrong School District and the Environmental Learning Center in Bethel Township, Armstrong County. The Crooked Creek Environmental Learning Center, situated on 31 acres of meadow and forest, is dedicated to promoting environmental education and resource conservation.

The record numbers also reflect the Armstrong School District's increasing emphasis on environmental education. Most of the students who studied bugs and walked the trails at the learning center this spring were seventh-grade students. All of them will take a new course in environment and ecology this fall as part of a curriculum upgrade at

Armstrong School District. The newly designed eighth-grade course ties in to Pennsylvania academic standards in environment and ecology.

Recognizing the importance of environmental education, the school district also temporarily assigned an experienced teacher with a biology and environmental education certification to run field trips at the Environmental Learning Center this spring. This teacher, Laurel Glover, has also provided environmental curriculum assistance to other teachers. Armstrong School District is paying for this temporary assignment through federal funds.

On their field trips this spring, students hiked interpretive trails. They studied bugs during stream studies, built terrariums to observe plants and small animals and tested water and soil. They used compound microscopes with flex-cam eyepieces that projected their findings onto a screen.

The Armstrong School District Foundation, a non-profit group that promotes innovative learning that otherwise might not happen, recognized the Environmental Learning Center's value to students by donating $500 to the center's new fund-raising campaign called "The Donation Tree." The Donation Tree is a 5-and-a-half-foot tall tree made of oak and walnut. It displays bronze, silver and gold leaves that are each printed with donors' names. Technology education students at West Shamokin Jr-Sr High School near Rural Valley built the 30-pound tree and gave it to the Environmental Learning Center.

The first leaf was in memory of Cynthia Venturini, a reporter and editor at the Leader Times newspaper in Kittanning. In the first three weeks of the Donation Tree campaign, so far 10 leaves have gone up, raising $2,000 for the non-profit Environmental Learning Center.

With all the good going on at the center, district officials invited teacher Laurel Glover and program coordinator Dennis Hawley onto the school district's TV show, "Education Today," for a show that aired in May. The center is in good hands with Hawley, an award-winning environmentalist. The Armstrong Conservation District named Hawley the Educator of the Year and the Kiski Watershed Association named him Environmentalist of the Year – both for 2004.

School students aren't the only ones who can enjoy the center. It has numerous public events. This first half of the year, the Environmental Learning Center has hosted a dozen events on everything from gardening to using traps to control wildlife. An April work weekend at the center drew 100 volunteers. The annual open house May 14 drew more than 200 people.

With this much momentum going, it's almost hard to imagine that the Environmental Learning Center's future was in doubt just a few years ago. The United States Army Corps of Engineers, which had built the center and operated it for years, had to close it due to budget cuts.

Fortunately, the Armstrong Educational Trust rallied to rescue the Environmental Learning Center and began operating it in 2002. The trust is a Community Education Council that provides education and training opportunities in Armstrong County. The AET has a 25-year lease with the Corps of Engineers to operate the facility.

Other partnerships are at work for the center. Its steering committee is a true government-education-community model. Four member school districts -- Freeport Area, Apollo-Ridge, Leechburg Area and Armstrong – are key stakeholders, as is Lenape

Technical School. There are also four watershed associations, the Penn State Cooperative Extension, representatives from local universities (like Indiana University of Pennsylvania and Penn State New Kensington), state commissions and others too numerous to mention.

This regional asset becomes all the more important when you realize that Armstrong County has no county or state parks. Unlike state and county parks, the ELC is not supported by tax dollars and must rely on grants, user fees, donations, and sponsors to sustain operation. That shows how crucial the Donation Tree campaign is.

To learn more, visit the Crooked Creek Environmental Learning Center website or 724-763-6316. Or, better yet, drop by the center to hike the nature trails, visit the herb garden or observe the impressive collection of mounted birds and animals.

Jonathan Szish is the School and Community Relations Coordinator for the Armstrong School District and can be contacted at 724-763-5268 or by sending email to: szij@asd.k12.pa.us .

Feature

Guided by Water - Conserving Aquatic Biodiversity in Pennsylvania

From Penn's Woods, The Nature Conservancy

From Penn's Woods newsletter, TNC PA Chapter
Photo: George C. Gress

"Water is the driving force of all nature." Declared five centuries ago and a world away, Leonardo DaVinci's words depict the 83,000 miles of rivers and streams characterizing Pennsylvania.

Aware of water's significance to the state's human and wild residents, the Conservancy is investing resources into protecting the Commonwealth's aquatic biodiversity.

"In a state this size, we're faced with diverse challenges to conserving aquatic biodiversity," shares Nels Johnson, director of conservation programs for the Pennsylvania chapter. "Most strategies will be tailored for specific locations dealing with issues including non-native species invasion, unsustainable water flows, uncontrolled nutrient runoff and in some cases, a need for more information."

The Conservancy has a head start on filling information gaps through its involvement in establishing an information clearinghouse on Pennsylvania's aquatic biodiversity. Coordinated in partnership with the Western Pennsylvania Conservancy and the state's Natural Heritage Program, and partially funded by GlaxoSmithKline, the Aquatic Classification Project will release a preliminary report later this year that locates and lists the condition of Pennsylvania's most unique aquatic species groups, and the habitats upon which they depend.

"This effort focuses on snails, mussels, fish and insects living in Pennsylvania's rivers and streams," shares Betsy Nightingale, aquatic ecologist for Pennsylvania's

Natural Heritage Program. "Understanding their location and the conditions within which these key species thrive will lead to more informed land management decisions."

One location that will benefit from the report is French Creek, which flows for 117 miles from origins in western New York, through rural northwestern Pennsylvania, until it empties into the Allegheny River.

The Conservancy has worked to influence agricultural land management practices in this watershed since 1991. Recently, a Kellogg Foundation study of the region revealed that the release of nutrients by farms was not threatening French Creek's water quality, and described it as quite good.

Armed with this knowledge, the Conservancy—together with the Pennsylvania Environmental Council, the Western Pennsylvania Conservancy and Allegheny College—has shifted its focus to inventorying and monitoring habitats that support populations of native fish and rare mussels. Once witnessed throughout the Northeast, these "biodiversity hotspots" are limited today to only the region's healthiest ecosystems. The coalition is also examining local transportation patterns to mitigate hazardous spills that have historically harmed mussel populations nationwide. And eliminating invasive zebra mussels continues—through signage and physical removal—at limited locations within the creek and a nearby lake.

In another part of the state, the Conservancy confronts the effects of nutrient and sediment runoff on the Susquehanna River's ecological integrity. Flowing through central Pennsylvania, the river drains an area roughly the size of South Carolina and eventually empties into the Chesapeake Bay. Numerous farms, and some of the largest contiguous blocks of mixed oak and northern hardwood forests in the eastern United States, populate the watershed.

"Working with partners and landowners to conserve and restore riparian forests—which serve as water filters for the river and its high-quality tributaries— is the primary strategy being employed throughout the Susquehanna River Basin," states Charles DeCurtis, director of conservation science for the Pennsylvania chapter.

Further east, decades of converting land and controlling water flow to support local population growth has disturbed the Upper Delaware River's natural rhythms. Spreading across four states and serving 17 million people, the river's main stem continues to be the longest undammed stretch of river east of the Mississippi. However, management of reservoirs located within the river's tributaries—together with destruction of forest cover and the spread of invasive plants—has resulted in poor water quality and temperatures and flow patterns that harm numerous aquatic species, including the federally endangered dwarf wedge mussel.

To restore balance, the Conservancy is helping the Delaware River Basin Commission to design a sustainable flow management system that would modify the frequency and duration of floods, better mimicking conditions needed for fish spawning and other natural events.

"Water really is a driving force for conservation in Pennsylvania," adds Johnson. "In addition to protecting rivers and streams like the Upper Delaware, the Conservancy's reach has extended to seasonal vernal pools, groundwater-influenced fens, and some of the state's numerous lakes and ponds. There is a lot of work to be done."
—Sara M. Kaplaniak

The Nature Conservancy, PA Chapter can be contacted at 1-800-75NATURE or by sending email to: pa_chapter@tnc.org . *This article reprinted with permission.*

Award Winning Performances

EnviroEducation.com, Steinbrenner's Recognized in Awards Program

The Pennsylvania Environmental Council announced the winners of the Western Pennsylvania Environmental Awards Program which were included in the May 30 *Digest*. But, the finalists selected in that program also deserve recognition for their good work.

The *Digest* will publish articles on the finalists over the next few weeks to help inspire others to take positive action to improve Pennsylvania's environment.

The Western Pennsylvania Environmental Awards, sponsored by the Pennsylvania Environmental Council and Dominion, celebrate the achievements of nonprofit organizations, businesses, schools, individuals, governments, and community groups that have made significant environmental contributions in the western Pennsylvania region.

Enviro Education

Enviro Education, based in Allison Park, connects students with higher education resources related to the environment through its website. Enviro Education is helping the leaders of tomorrow find the higher education degrees and certifications they need to make a difference in the environmental movement.

It provides guidance and information for students who will be making some of the most important decisions of their lives – where to go to school and what career path to follow.

Since choosing a school is just one part of the challenge for students, Enviro Education also provides quality guidance content, including informative articles, interviews with prominent environmental professionals, and how to apply for scholarships.

In 2004, it is estimated that 170,900 students were referred to environmental programs and information through this internet resource.

Lowell and Jan Steinbrenner
Carnegie Mellon University

In 1998, Carnegie Mellon University's (CMU) strategic plan was developed and set a goal for the school to "change the ways the world thinks and acts about the environment, through educational and research methods and results, through issues raised, and through outcomes produced." While the components required to meet this goal were present at CMU, they needed an umbrella organization to create synergies and generate new opportunities for the campus community, while increasing potential for regional and global impact.

Having a strong commitment to CMU and a deep concern about the quality of life for future generations, Trustee Lowell Steinbrenner (Carnegie Institute of Technology B.S. 1955, M.S.E. 1960) and his wife Jan made a $4 million contribution to the University to establish an endowment that would support a permanent commitment to the environmental goals of CMU. Established in 2004, the Steinbrenner Institute for Environmental Education and Research now serves as the nexus of campus environmental initiatives and promotes action for a sustainable region, nation, and world.

Opinion

Farms- A Good Place to Grow Pollution Controls

By Matthew Ehrhart, Executive Director, Chesapeake Bay Foundation in Pennsylvania

A flurry of debates has recently arisen surrounding American Rivers' designation of the Susquehanna River as the nation's most endangered river. While it is true that the Susquehanna River and its vast network of tributaries are not the most polluted waters in the nation, most scientists agree that the Susquehanna watershed is endangered by a host of growing insults, with sediment, phosphorous and nitrogen pollution the largest threat to local rivers, streams and to the Chesapeake Bay.

Abandoned mine drainage is still a significant problem in Pennsylvania. However, pollution from runoff from the growing number of lawns, construction sites, parking lots, inadequately treated industrial and sewage discharge and even vehicle exhaust has eclipsed the impact of abandoned mine drainage. In fact, such runoff pollutes over 5,600 stream miles and over 31,000 lake acres in the state, much of which contamination lies within the Susquehanna basin. But the largest source is agriculture and, more and more, from the excess manure produced by livestock. Agriculture is the source of approximately 45 percent of the nitrogen and 55 percent of the phosphorous that Pennsylvania contributes to the Bay. In contrast, industrial discharges, wastewater treatment plants and other point sources combined contribute approximately 25 percent of the phosphorous and 13 percent of the nitrogen.

Pennsylvania's landscape and cultural tradition depends upon environmentally and economically viable farming, and farmers have demonstrated that if given proper tools, they can reduce pollution and help improve the health of local waterways. There are many tools currently available and others on the horizon. For example, reducing excess nitrogen and phosphorous in livestock feed can reduce manure nutrients and their impact on water quality while also cutting manure management costs without decreasing production. Currently, phosphorous levels in dairy rations are 130 to 160 percent of what the cow actually needs.

As a result of the Phosphorous Index and other changes to Concentrated Animal Feeding Operation (CAFO) and Nutrient Management regulations, many livestock producers will need strategies to manage the excess manure that is produced on the farm. Lowering phosphorous levels in dairy feed could reduce pollution from cow manure by 30 or 40 percent while providing significant financial savings to the dairy industry because there is less excess manure to manage. Similar reductions have been achieved with poultry feed modifications.

In an effort to further reduce agriculture pollution to nearby rivers and streams and provide farmers greater incentives not to sell their land to developers, economically rewarding initiatives, which turn excess manure into a valuable commodity, need to be developed. "Bioenergy" plants, which generate power from manure and other farm products, are already operating on commercial scale in Europe and Canada and at some sites in the United States. Manure can also help restore soil fertility on lands left barren by mining operations. Turning excess manure into compost and "palletized" fertilizer is also possible, but appropriate markets need to be expanded. It is possible for manure to be a valuable resource for farmers and that alternative uses for manure could help stimulate rural economies while keeping farmers farming.

In addition to improving the efficiency of livestock feed and supporting alternative uses for manure, there are supplemental measures that can be used to protect our rivers and streams while also safeguarding, and even enhancing, a farmer's bottom line. These and other innovative solutions to reduce agricultural water quality impairments are only a part of the solution to maintaining a robust and sustainable agricultural industry in Pennsylvania. In order for cash strapped farmers to implement the necessary conservation measures, policymakers at both the state and federal level must provide the resources that are so critically needed.

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Quick Clips

Protecting the Environment Together – EACs
Oley Supervisors Consider EAC
Crawford County Conservation District Moves Into Historic Home
Scouts Confront Costly Nature Lesson
Developer Wants to Study Wind Farm on Authority Land
Study Will Determine Effect of Wind Turbines on Bats
Proposed Biodiesel Plant Gets Grant
D'Agostino Named President of Central PA Sustainable Energy Fund
Sunny Future for Westmoreland Solar Company
New Coal Technology Could Help Reduce Emissions
Northampton Open Space Funding Plan Moves Forward
Pike Agrees to November Bond Referendum
Vandling Hopes Recycling Program Cuts Waste Costs
Bluebirds: Why They're Special
Peregrine Falcons Making Continued Recovery

Watershed NewsClips

PA Watersheds Data System Unveiled at SRBC Reception
Negotiating Terms of D&O Policy for Watershed Groups
Marlborough Twp. To Buy 125 Acres Near Unami Creek
Forest a Little Greener After Cleanup Efforts

Editorial: Mine Reclamation Project Provides Fresh Starts
DEP Reminds Residents to Take West Nile Virus Precautions

Regulations

The Environmental Quality Board this week published final regulations making changes to the handling and storage of explosives. The Fish and Boat Commission published several notices about program changes related to endangered species and designating wild trout waters. They include--

- Extending the public comment period on a proposal to add the spadefoot toad as an endangered species in Pennsylvania.

- Proposed change to the list of Class A Wild Trout Waters in Potter County.

Pennsylvania Bulletin – June 18, 2005

Comment Deadlines: Regulations Technical Guidance

Copies of Proposed Regulations **Status of Regulations, 6-Month Calendar**

Technical Guidance & Permits

The Department of Environmental Protection published notice of organizational changes within the agency.

For copies of Draft Technical Guidance **For copies of Final Technical Guidance**

Calendar of Upcoming Events

Upcoming conferences, meetings, workshops, plus links to other online calendars. Go To: PA Environment Digest Calendar Page

- **June 20** – Senate Appropriations Committee to consider Senate Bill 197 (Rafferty-R-Montgomery) allowing the consideration of past compliance record in landfill permit decisions and Senate Bill 723 (Wenger-R-Lancaster) making changes to definition of eligible entity in the Agricultural Security Law.
- **June 21** – House Environmental Resources & Energy Committee informational meeting on global climate change.
- **June 21** – Senate Local Government Committee to consider House Bill 87 (Steil-R-Bucks) further authorizing local governments to preserve open space through the waiver of certain service fee, House Bill 136 (Fleagle-R-Franklin) authorizing local government funding of watershed associations.
- **June 21** – Environmental Quality Board meeting.

- **June 21** – Chesapeake Bay Found Sponsors Advanced Public Outreach Workshop. Harrisburg.
- **June 22** – House Agriculture Committee will consider House Bill 1646 (Hershey-R-Chester) that establishes an Agricultural Review Board (the Administration's ACRE proposal).
- **June 27** – Joint Legislative Air and Water Pollution Control and Conservation Committee hearing on coal availability in Pennsylvania.

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**

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.

Answer From Page 1 – *Beach 1 on Lake Erie at Presque Isle*