

## DEP Day at the Legislature



Photo by Sarah Alford

Department of Environmental Protection employees mingle with Capitol visitors during the annual DEP Day at the Legislature.



Photo by Mike Huff

Staff from the Division of Water and Waste Management's Environmental Enforcement Section participate in DEP Day at the Capitol.

## Capitol crowd

Seventy Department of Environmental Protection employees from 16 agency offices participated in the annual DEP Day at the Legislature.

With school being called off because of frigid temperatures, crowds were thin at the state Capitol, which is usually bustling

with visitors, as well as school and tour groups, during the Legislative session.

The DEP had information booths set up throughout the second floor of the Capitol building.

A date for next year's DEP Day at the Legislature has not been set.

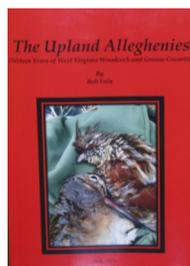
## Former agency staffer pens second outdoors book

By Tom Aluise

Bob Fala went back to his field journals from the past 16 years to come up with ideas for his second book on hunting.

The former Division of Mining and Reclamation biologist recently released "The Upland Alleghenies (Sixteen Years of West Virginia Woodcock and Grouse Coverts)."

The 159-page paperback follows Fala's "Ramblin Outdoors — A Favorite Selection of Wildlife Stories from the Woods and Waters."



the most interesting stories. Fala developed those stories into the book's 16 chapters — one chapter for each year represented in his journals.

"This one is more of a book, while my first publication was

Fala's latest work took roughly a year to write and is a product of pouring through old hand-written field journals to come up with

more of a compilation," Fala said. "This was fun for me because I went back and revisited my past."

The setting for most of Fala's stories is West Virginia's southern coalfields and the highlands of Canaan Valley. The book follows the adventures of hunters and their bird dogs as they visit the hunting coverts of the ruffed grouse, American woodcock and bobwhite quail.

"It's more of a bird hunter's book, but there's some stuff in the book about a dog getting

## From the DEP Safety Committee

# Meth hazards lurk for innocent public

The clandestine production of methamphetamine has been widely covered in the news. The drug itself poses many risks to the user. The materials used in its production pose more risks to innocent bystanders, especially since those making meth aren't all that concerned with the proper disposal of their wastes.

The production method that has gained popularity lately is the so-called "One Pot," or "Shake and Bake" method. It is a product of an earlier method that required the conversion of pseudoephedrine to methamphetamine in two steps, and took a longer time.

A One Pot will typically be found in a plastic bottle. A 32-ounce Gatorade bottle seems to be the most popular. These bottles will usually contain a white to light tan powder which is a combination of sodium hydroxide, ammonium nitrate, and pseudoephedrine tablets.

There will also be black pieces visible, which are lithium metal. There may or may not be a liquid present in the One Pot. If there is, it is most likely camp stove fuel, and is either a clear, pale red, or pale blue liquid. The One Pot will usually produce a strong ammonia odor.

The One Pot can be quite flammable depending on how much fuel is present. The next



few paragraphs will go through the hazards of the individual materials.

Sodium hydroxide is a white solid material that is typically sold as a drain cleaner. It is also known as lye. There are quite a few brands that are just plain lye. However, a popular form is a mixture is Crystal Drano, which is a blue and white pelleted material with small pieces of aluminum in it.

Lye is very hygroscopic, which means it will absorb water from the air.

When dissolved in water, lye produces a very high pH solution, which is very corrosive. Simple lye solutions are odorless and feel slippery to the touch. If one is exposed to a lye solution, wash the area with large amounts of water.

Ammonium nitrate is a white solid material that is usually found in small spherical pellets.

The most popular source for meth production is from cold packs sold in the first aid supply section. When ammonium nitrate is mixed with water it sucks energy from the environment, so the resulting sludge/solution feels cold to the touch.

It presents two distinct hazards in the One Pot. First, when mixed with a little water and lye, it produces ammonia gas. This gas has a very irritating odor, is corrosive and can be toxic in high enough concentrations.

Second, ammonium nitrate is a very powerful oxidizer, and can greatly increase the intensity of any fire that occurs.

Pure lithium metal is a dull silver-colored metal. The most popular source of lithium for a One Pot is from batteries. When it is recovered from batteries it is a thin black ribbon material.

Lithium reacts with water to produce heat, hydrogen gas and lithium hydroxide. The hydrogen gas burns very intensely, and the resulting solution is high pH, corrosive.

The final two parts of the One Pot are probably the least hazardous from a contact or inhalation perspective. The camp fuel is a very flammable liquid, so

See METH, Page 6



Photo by Gene Coccari

## Wrong way!

No timetable has been set but it's likely most or all of the Department of Environmental Protection's block sign that fronts the DEP headquarters' building in Kanawha City will have to be rebuilt following a two-car accident on 57th Street in December. General Services is handling the replacement of the block.

indepth

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*InDEPth is published monthly by the West Virginia Department of Environmental Protection, an affirmative action, equal opportunity employer.*



## ALL IN A DAY'S WORK

**K**evin Saunders, an Environmental Enforcement inspector out of the Teays Valley office, had just investigated a complaint in southern Putnam County and was making his way back to the office when he encountered a strange object heading toward his car.

"I was trying to focus on picking out different landmarks to help me retrace my path since I had nearly gotten lost on my way to this

particular site," Saunders said. "As I rounded a curve, I was surprised to see a cow trotting directly toward me in the middle of the road."

Saunders said a single car followed directly behind the cow, which refused to move to either side of the road.

"The cow seemed determined to stay directly in the center of the road," Saunders said.

"I wondered if the driver might be a farmer trying to round up some escaped livestock, but after I passed them, I was convinced that the whole ordeal had caught him off guard, too. He was laughing his head off as he followed it down the road."

**Got an interesting photo from the field that you'd like to share? Send it to: Thomas.J.Aluise@wv.gov**

### BOOK

Continued from Page 1

bitten by a snake or in a fight with a beaver," Fala said. "It's pretty specialized, but it has got some coal mining and other stories that may be of interest to people."



**Fala**

Fala, who retired from the DEP in 2011 and continues to write a weekly column for the Logan Banner, said this likely is his last book.

McClain Printing Co., out of Parsons, W.Va., printed the book. It costs \$21.95 and is available through Amazon.

## LRS certification exam scheduled for March 26

The state Department of Environmental Protection is announcing the next examination for licensed remediation specialist certification is scheduled from 1:30 to 3:30 p.m. on March 26, at the Marshall University Graduate College in South Charleston. The exam will be given in Room 205 of the Robert C. Byrd Academic Center Building, 100 Angus E. Peyton Dr., South Charleston.

Certification is required for anyone submitting voluntary remediation and

See LRS, Page 8

## Water Management Plan benefits many

The Water Use Section of the Division of Water and Waste Management, this winter, completed the state Water Resources Management Plan in accordance with the requirements of the Water Resources Protection and Management Act.

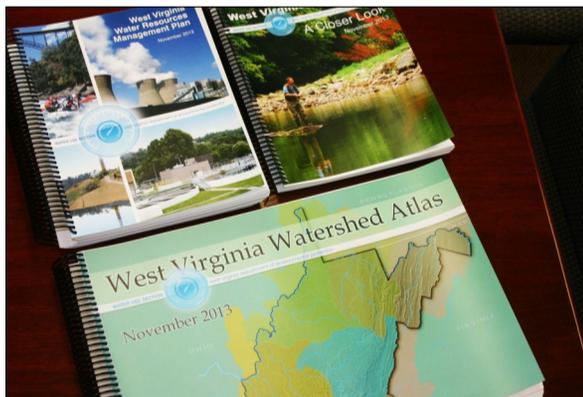
The plan was submitted to the Joint Legislative Oversight Commission on State Water Resources. Brian Carr, the section's manager, said "this has been an enlightening experience for the Water Use Section and I am honored to have served as project manager in the construction of the Plan."



**Carr**

In addition to Carr, the Water Use Section team members include Jason Harmon, Jon Michael Bosley, Jennifer Bannister and Mark Collins, all under the direction of DWWM Deputy Director Pat Campbell.

The staff worked diligently to organize the vast amount of data collected since 2003 to produce not only the Water Resources Management Plan report, but also a Watershed Description companion report and a Watershed Atlas, all of which can be downloaded from the Water Use Section's home page on the DEP website:



The Water Resources Management Plan, along with its Watershed Description companion report and Watershed Atlas, is available on the agency web site.

<http://www.dep.wv.gov/WWE/wateruse/WVWaterPlan/Pages/default.aspx>

The Section also created a GIS-based water use website, which is expected to become the one-stop shop for water resource information for the state.

See PLAN, Page 8

# The Year in Pictures

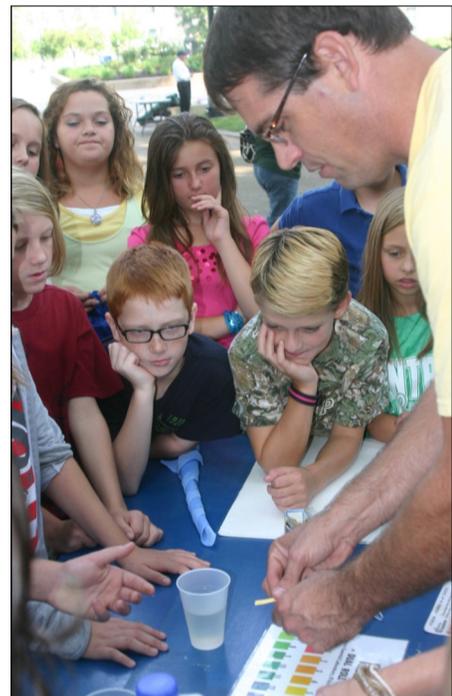
## A look back at DEP happenings from 2013



Gov. Earl Ray Tomblin visited DEP headquarters, toured the building and later met with agency workers.



Richard Roy, right, from the Division of Mining and Reclamation, explains a surface mine model to a group of Boy Scouts during the National Boy Scout Jamboree in Fayette County in July.



Ed Andrews, from the Division of Air Quality, has the full attention of a group of grade-schoolers during a Project WET Water Festival on the State Capitol grounds.



Former Environmental Enforcement Chief Mike Zeto tells a story about EE's Connie Bledsoe during a retirement reception for Bledsoe. Zeto also retired from his post in 2013.

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## More photos next page

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# The Year in Pictures ... continued



The Department of Environmental Protection's Enviro DEPot gave agency employees a chance to check out various educational/ interactive displays that different DEP offices use throughout the year during outreach events.



Despite having to move indoors because of weather, the 2013 Earth Day Celebration was a success. Pictured above is the DEP's Tomi Bergstrom.



John Flesher, from the DMR's Logan Office, was the 2013 Employee of the Year.



The WVU Mountaineer paid YEP Director Diana Haid and Youth Day a visit.



A hearty group of agency staffers participated in an Adopt-A-Highway cleanup around the Department of Environmental Protection's Kanawha City headquarters building.



The DEP's Natalie Paynter hones in on a pitch during Corporate Cup competition.

**METH**

Continued from Page 2

avoiding open flames or exposing the lithium to large amounts of water is a must. The pseudoephedrine tablets pose no real hazard at all.

In addition to hazards associated with the One Pot method, there also can be acid gas generators. These are used to convert the methamphetamine from a soluble in the camp fuel to an insoluble in the camp fuel.

They are usually found in a plastic bottle with some sort of tubing attached to the top. The first component in the acid gas generator is some sort of salt, the most popular being sodium chloride (i.e. table salt or rock salt), or calcium chloride. Neither of these materials is very hazardous.

The second component is either hydrochloric acid or sulfuric acid drain cleaner. The hydrochloric acid is a pale to dark yellow liquid. It has a very irritating odor similar to chlorine and is very corrosive. The sulfuric acid drain cleaners typically used are dark brown to black solutions. They don't usually have an overwhelming odor, but can sometimes smell like rotten eggs.

Sulfuric acid is very corrosive. When the salt and acid are mixed, hydrogen chloride gas is produced. This gas has a very sharp acidic chlorine odor. It is both corrosive and toxic.

To summarize the types of hazards associated with meth production:

The inhalation hazards are the ammonia gas, the hydrogen chloride gas, and the fumes from the hydrochloric acid.

The corrosive contact hazards are the sodium hydroxide and its solutions (high pH), the sulfuric acid (low pH), and the hydrochloric acid (low pH).

A flammability hazard is the camp fuel. The intensity of any fire can be increased by the presence of the ammonium hydroxide, which is an oxidizer.

If you find anything that you suspect might be discarded meth-making materials, don't touch them, and call the police. You can also contact the DEP Homeland Security and Emergency Response section with questions.



**43 years later ...**

Division of Air Quality Director John Benedict has officially left the building ... for good. Benedict headed off to retirement on Feb. 28, after 43 years, 8 months and 12 days of state government service. Benedict joined the state Air Pollution Control Commission on June 18, 1970. He was recognized by Secretary Randy Huffman (above) during a ceremony at DEP headquarters.

**DEP  
retirements**

**Michael Zeto**

Division of Water and Waste Management

**Last day:** Dec. 27, 2013

**Years of service:** 34

**David Nesbitt**

Division of Water and Waste Management

**Last day:** Dec. 31, 2013

**Years of service:** 7

**Jeanne Chandler**

Division of Air Quality

**Last day:** Dec. 31, 2013

**Years of service:** 35

**Twila Carr**

Division of Land Restoration

**Last day:** Dec. 31, 2013

**Years of service:** 25

**Steve Graley**

Office of Administration

**Last day:** April 30, 2014

**Years of service:** 21

**Pam Nixon**

Office of Administration

**Last day:** Jan. 31, 2014

**Years of service:** 15

**Dale Gable**

Division of Water and Waste Management

**Last day:** Nov. 30, 2013

**Years of service:** 25

**John Benedict**

Division of Air Quality

**Last day:** February 28, 2014

**Years of service:** 43

**Donald Hogan**

Office of Abandoned Mine Lands

**Last day:** February 28, 2014

**Years of service:** 5

**Deborah Quinn**

Division of Water and Waste Management

**Last day:** January 31, 2014

**Years of service:** 30

# The gang's all here



Approximately 75 current and former Division of Mining and Reclamation employees, most of whom now work, or at one time worked, in the Logan office, got together for a group photo during the annual Christmas luncheon at the DEP's Logan office. There are even a few potential future employees in the photo on the far left.

## Agency transactions

### Recent DEP hires

- ▶ **Jeremy Ayers**  
Office of Abandoned Mine Lands
- ▶ **Darren Bennett**  
Office of Abandoned Mine Lands
- ▶ **Samantha Blair**  
Division of Mining and Reclamation
- ▶ **Gerald Crispino**  
Division of Water and Waste Management
- ▶ **Linda Gore**  
Division of Mining and Reclamation
- ▶ **Alan Ketchem**  
Division of Land Restoration
- ▶ **Mark Weaver**  
Division of Mining and Reclamation
- ▶ **Sally Ann Brown**  
Division of Water and Waste Management
- ▶ **Gayle Harman**  
Division of Mining and Reclamation
- ▶ **Nicole Howard**  
Division of Water and Waste Management

- ▶ **Lisa Mahaffey**  
Office of Administration
- ▶ **Sara Jean Miller**  
Division of Water and Waste Management
- ▶ **Carissa Turley**  
Division of Water and Waste Management
- ▶ **Melanie Hankins**  
Office of Oil and Gas
- ▶ **Hazel Judy**  
Division of Water and Waste Management
- ▶ **Amanda Skaggs**  
Division of Mining and Reclamation
- ▶ **Pamela Slater**  
Division of Water and Waste Management
- ▶ **Ken Toler**  
Division of Mining and Reclamation
- ▶ **Kelli Williams**  
Information Technology Office
- ▶ **Harmony Dressler**  
Public Information Office
- ▶ **Fred Legg**  
Office of Abandoned Mine Lands
- ▶ **Donna Stump**  
Division of Mining and Reclamation

### Internal Transfers

- ▶ **Amy Halstead**  
Division of Mining and Reclamation
- ▶ **Lester Pritt**  
Office of Abandoned Mine Lands
- ▶ **Carol Leffew**  
Office of Administration
- ▶ **Derek Giebell**  
Division of Mining and Reclamation
- ▶ **Christina Larue**  
Homeland Security and Emergency Response
- ▶ **Barbara Mays**  
Office of Abandoned Mine Lands
- ▶ **Jason McDougal**  
Division of Land Restoration
- ▶ **Michael Pastine**  
Division of Land Restoration
- ▶ **Daniel Johnson**  
Division of Mining and Reclamation
- ▶ **Christopher Smith**  
Division of Water and Waste Management

## Hunting and Fishing Show



The Division of Water and Waste Management sponsored a booth at this winter's Hunting and Fishing Show at the Charleston Civic Center. Employees who participated included: John Wirts, Susan Rose, Jeff Bailey, Steve Young, Ryan Pack, Karen Maes, Ken Poland, Sarah Kuhn, Tim Craddock, Kevin Coyne, Elbert Morton, Mike McDaniel, Tomi Bergstrom, Megan Grose, Nick Murray, Janice Smithson and State Stutler. Above, Tim Craddock and Ken Poland take their turn interacting with visitors to the DWWM booth.

### LRS

Continued from Page 3

brownfields cleanup designs to the agency's Office of Environmental Remediation (OER) for review.

To qualify for the exam, you must have a bachelor's degree in an approved scientific field and at least six years of relevant professional experience. You can also qualify with a high school diploma and 10 years of relevant professional experience. In either case, you must have at least one year of supervisory or project management experience.

To take the exam, register online at [www.dep.wv.gov](http://www.dep.wv.gov). Under the Office of Environmental Remediation, go to the licensed remediation specialist online application and follow the instructions.

Online applications must be received by March 12. Only approved candidates with picture identification cards will be admitted to the testing site.

## Spring is time to get rid of those old tires

Spring is a busy time for tire collections around West Virginia and the Rehabilitation Environmental Action Plan Program that coordinates the events. Many collections have already been scheduled. Following is a partial list:

- March 15 — Kanawha County, 8 a.m. to 4 p.m., Cabin Creek Go-Mart
- March 22 — Putnam County, 9 a.m. to 2 p.m., Valley Park Wave Pool
- March 29 — Kanawha County, 8 a.m. to 4 p.m., Institute
- March 29 — Gilmer County, 8 a.m. to 2 p.m., Gravel lot next to Foodland, Glenville
- April 5 — Wirt County, 9 a.m. to 3 p.m., SWA, Elizabeth
- April 5 — Ritchie County, 8 a.m. to 2 p.m., DOH Garage, Ellenboro
- April 12 — Tyler County, 8 a.m. to 2 p.m., Tyler County Fairgrounds
- April 12 — Kanawha County, 8 a.m. to 4 p.m., Elkview
- April 19 — Clay County, 9 a.m. to 3 p.m., Pierson 's Lumber
- April 26 — Pleasants County, 8 a.m. to 2 p.m., St. Mary 's Marina
- April 26 — Kanawha County, 8 a.m. to 4 p.m., Southridge
- May 3 — Mason County, 9 a.m. to 3 p.m., Farm Museum Main Building
- May 3 — Brooke County, 8 a.m.-1 p.m., Brooke Recycling



- Center
- May 10 — Taylor County, 8 a.m. to 2 p.m., Taylor County Fairgrounds
- May 17 — Marshall County, 8 a.m. to 2 p.m., John Marshall High School
- May 31 — Upshur County, 8 a.m. to 4 p.m., City of Buckhannon Transfer Station
- May 31 — Calhoun County, 9 a.m. to 3 p.m., Calhoun SWA Recycling Center
- June 7, Jackson County, 9 a.m. to 3 p.m., Miller Drive Athletic Field, Ripley
- Sept. 27 — Lewis County, 8 a.m. to 2 p.m., Tire and Rubber Inc., Weston

### PLAN

Continued from Page 3

This is the working end of the Water Resources Management Plan and will serve as the public portal to the Water Use Section and the information the Section collects.

Carr added that he would like to thank Tom Aluise and former Communications Chief Kathy

Cosco, of the Public Information Office, for their review of the plan, as well as the agency's General Counsel, Kristin Boggs, and Deputy Cabinet Secretary Lisa McClung for their assistance in producing recommendations to the state Legislature.

Carr noted that the facts and data amassed as part of this task will positively aide state

lawmakers in making future water resource-related and economic development decisions.

Although this is the finish line for this stage of development of the Water Resources Management Plan, it also marks the beginning of concerted efforts to better manage the state's water resources for its citizens.