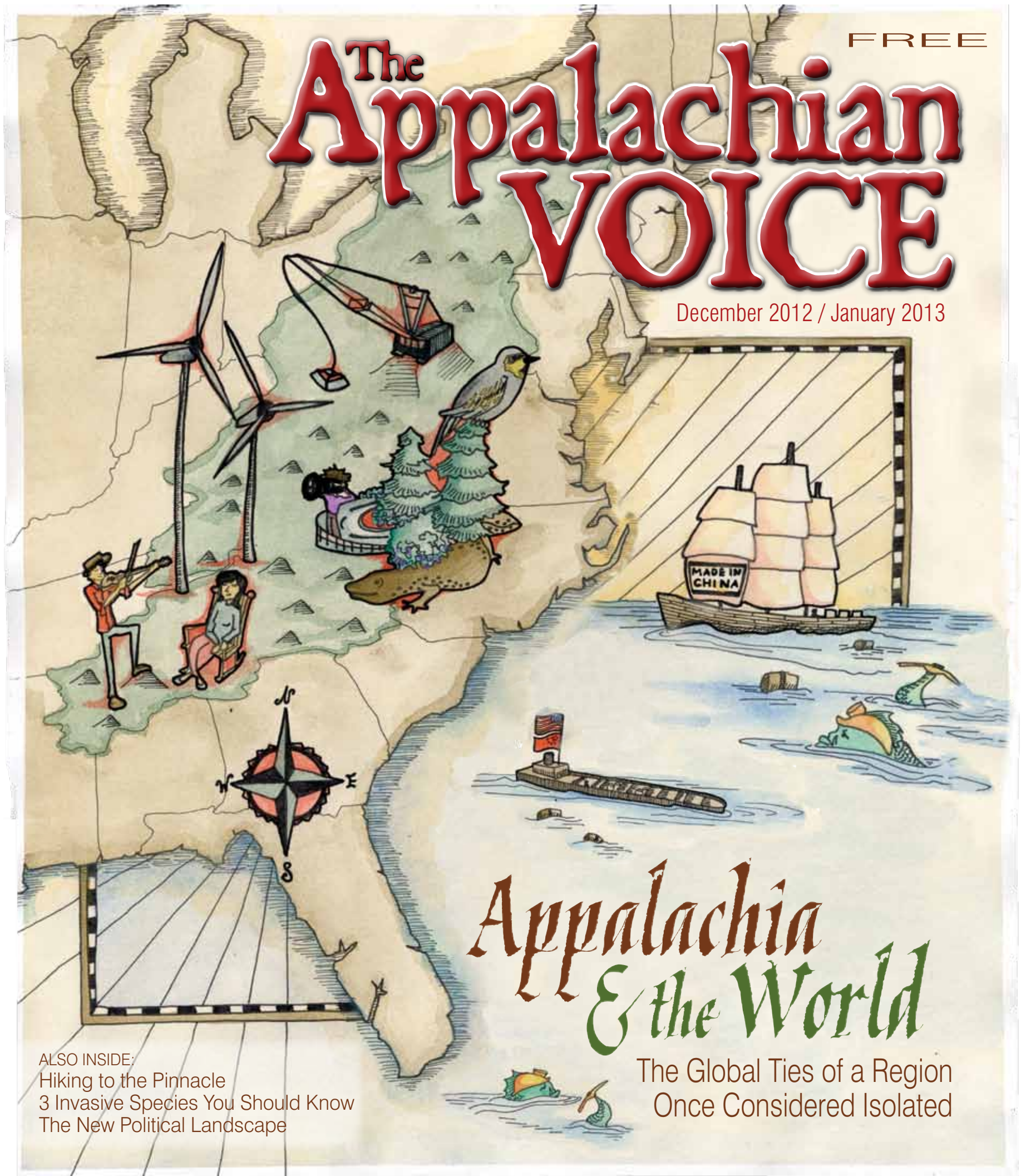


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# The Appalachian VOICE

December 2012 / January 2013



## Appalachia & the World

ALSO INSIDE:  
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The New Political Landscape

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Once Considered Isolated

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**A Note from our Executive Director**



Dear Readers,  
 It's been an exciting and productive year for Appalachian Voices. Not only did we celebrate our 15-year anniversary, we also celebrated several key victories — defeating a massive new coal plant in Virginia, bringing Kentucky coal companies to justice, organizing strong support for protecting Tennessee's Cumberland plateau, and showcasing the benefit of strong clean water laws throughout the region.

As we look ahead to 2013, we see tremendous opportunities on the horizon. Decisions will be made in Congress, in the White House, and in state capitals across the South that will impact the air and water quality, the mountains, and the communities of our region for generations to come.

Appalachian Voices will be there to defend our natural heritage — and we need you with us. We have several major initiatives to roll out in the coming year, including a robust new energy-savings program aimed at the electric cooperatives that serve the South, which has the largest untapped source of wasted energy of any region in the country. We also plan to unveil a groundbreaking online tool that will empower citizens to hold coal companies and government regulators accountable for water pollution. In Virginia, we will initiate a statewide campaign for achieving clean energy, including wind, solar and energy savings, and rally a citizen movement to support it. And nationwide, we will advocate for an end, once and for all, to mountaintop removal coal mining in Appalachia with our "No More Excuses!" campaign.

As a reader of *The Appalachian Voice*, you have a special role in helping our organization succeed. We'd love to hear from you! Please take a moment to participate in our readership project (see opposite page), and consider supporting the work of Appalachian Voices with a year-end gift.

Wishing you a happy and healthy holiday season,  
*Willa*  
 Willa Mays, Executive Director

**INSIDE THIS ISSUE**

*Appalachia & the World*

Our region, with all of its intricacies, sometimes seems like a universe unto itself. But Appalachia is, and always has been, tied to the pulse of the planet. The following features explore our paradoxical, sometimes-surprising relationships with the outside world.

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**About the Cover**  
 The cover and the centerspread map are pen and ink watercolor drawings by Melissa Shields, an illustrator and graphic designer based in Boone, N.C. Melissa has a passion for doodles, hiking, painting with water colors and coding website designs. To see more of her work, email [shieldsma91@gmail.com](mailto:shieldsma91@gmail.com)

**ASK AN EXPERT:** Our next issue of *The Appalachian Voice* will dive into our region's rich ecology. Do you have a burning question about the wildlife in your neck of the woods? Send your thoughts to [voice@appvoices.org](mailto:voice@appvoices.org), and we'll do our best to find an answer to your query!

**Raise YOUR voice and Enter to Win!**

**Sign up to help us fine tune *The Appalachian Voice***

Every issue, we strive to provide the best quality content in *The Appalachian Voice* — and now we need your help. In early 2013, we need readers like you to tell us what you like about *The Appalachian Voice* and what you would most like to see in the future.

Want to help? Sign up and we'll enter you in a series of drawings for special prizes, including our famous organic cotton **Appalachian Voices tees**, our super popular **tote bags**, and a **signed copy of Barbara Kingsolver's new book, *Flight Behavior***. Drawings will end on February 1, 2013, but you can respond any time! All respondents will receive a free Appalachian Voices sticker.

To fill this out online, visit: [appvoices.org/voicesurvey](http://appvoices.org/voicesurvey)

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**How often do you read *The Appalachian Voice*?**

- This is my first issue!
- I pick up *The Appalachian Voice* fairly often
- I am a subscriber/Appalachian Voices member

We promise that by signing up for this project, you will receive only a handful of emails about *The Appalachian Voice* in early 2013. To become more involved, please check the boxes below.

- I want to receive periodic updates and online-only articles from *The Appalachian Voice*
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## January Is Radon Awareness Month

By Matt Grimley

2013 is beginning with an invisible, odorless bang. January is National Radon Awareness Month, designed to draw attention to radon as a serious public health issue and, more importantly, to motivate Americans to take action and protect themselves from radon's harmful health effects.

According to the U.S. Environmental Protection Agency, exposure to radon is the second leading cause of lung cancer in the United States and the number one cause among non-smokers. Radon causes more than 20,000 lung cancer

deaths in the U.S. every year.

Radon is a naturally occurring, invisible, odorless radioactive gas that comes from the breakdown of uranium in soil, rock and water. The gas is especially prevalent in Appalachia.

Western North Carolina tends to have elevated radon levels, according to Phillip Ray Gibson, the Western North Carolina radon program coordinator for the state health department. He commented that there are no reliable predictors of radon. "People simply need to test [their homes]," he urged, citing that tests are inexpensive. West Virginia and

Kentucky state agencies offer free testing kits on an ongoing basis, and North Carolina's radon program will be giving away free short-term test kits during the month of January. But everyone should check their local agencies for deals.

Gibson noted that "it is much cheaper to add radon resistant elements to new construction rather than retrofitting." While a homeowner cannot know if radon gas is a problem until after construction is completed, the savings from designing proactively greatly outweigh the costs of post-construction renovation. New developers should

consider building "Radon Resistant New Construction" to protect their buildings, Gibson suggests.

New homes and older homes can have elevated radon levels. Hotspots for entry include basements, first-floor rooms and garages, but radon can be found anywhere in a home.

There are many testing options. Easy-to-use test kits can usually be found at hardware stores for a low price, and more information on obtaining test kits and test coupons is available at [sosradon.org](http://sosradon.org). Find a local radon program online at [epa.gov/iag/whereyoulive.html](http://epa.gov/iag/whereyoulive.html) or by calling 1-800-SOS-RADON.

## Sand Lick Cleanup Anticipated

Kentucky's Sand Lick Fork area, a tributary of the Red River, might be receiving some additional care. Daniel Boone National Forest is beginning a potential watershed restoration project to improve water quality and reduce soil loss. The Sand Lick Fork area is adjacent to Natural Bridge State Park in the Red River Gorge, and is a popular location off-road-vehicle location even though using recreational vehicles is illegal on many of the roads and trails.

The Forest Service's proposal includes cleaning up abandoned oil infrastructure such as wells and pipes, potentially changing the status of the area's 8.4 miles of official roads and 22 miles of unauthorized and abandoned roads, and restoring 2.5 miles of Sand Lick Fork and its floodplain.

The agency is at the beginning stages of the project and intends to develop an environmental impact statement before moving forward.

## Showing Off Your Mussels: Powell River Restocks Declining Populations

This fall, more than 7,000 juvenile mussels were released into the Powell River, the largest number of endangered mussels planted in the history of the river's restoration project. The release was coordinated through a partnership between Virginia Tech, Lincoln Memorial University, the Tennessee Wildlife Resources Agency, and the U.S. Fish and Wildlife Service.

6,086 oyster mussels, 1,000 combshell mussels and 27 snuffbox mussels were released on river sites near the Powell River Brooks Bridge on Tennessee State Route 63. All three species are listed as federally endangered.

Mussel populations have declined significantly in



The population of the snuffbox mussel, in terms of range and numbers, appears to have declined by at least 90 percent. Photo by G. Thomas Watters, Ohio State University

rivers such as the Powell, prompting restorations efforts. Because mussels help to clean up polluted rivers and rebuild river ecology, these bivalves are seen as essential to such projects.

Mussels are also sensitive to water pollution and indicate a river's level of health. An adult mussel can filter 10 to 50 gallons of water a day.

The Powell River is home to 13 mussel species listed as federally endangered and has the second-highest concentration of rare and endangered mussels in the nation. Only the neighboring Clinch River contains more of the endangered bivalves.

## Duking It Out: CEO Retires, Rates Increase

By Matt Grimley

Under a proposed settlement with the N.C. Utilities Commission and the N.C. Public Staff, Duke Energy President and CEO Jim Rogers will retire from his positions at the end of 2013.

The agreement, announced late November, would resolve all issues involved in the commission's investigation of Duke's \$32 billion merger with Progress Energy this past summer. Immediately after their merger, Progress Energy CEO Bill Johnson was terminated, and he received as much as \$44.4 million in severance, pension and benefits.

The commission was inves-

tigating whether Duke intentionally misled regulators by maintaining that Johnson would run the combined company.

Rogers, who replaced Johnson, is not required to retire until Dec. 31, 2013, when his current contract expires. The Duke board will try to choose a new CEO as early as July under the proposed agreement.

As part of the settlement, Duke's North Carolina customers will receive an extra \$25 million in fuel and fuel-related cost savings beyond the \$650 million that the company already promised with the merger. Duke will also be required to appoint two new board members, one by

April and one by December 2013.

November was a busy month for the utility. On Nov. 1, Duke Energy posted a net gain of \$594 million — a better-than-expected quarterly profit and up from \$472 million a year earlier. A few weeks later, the N.C. Supreme Court heard arguments over Duke's 7.2 percent electricity rate increase, which went into effect last February. Progress will seek their own double-digit rate increase next spring.

The N.C. Attorney General's Office has said that Duke's proposed settlement with the Utilities Commission won't affect their own investigation into the merger.

## Relicensing The Dries' Dam

The Federal Energy Regulatory Commission has requested that several additional studies be done as part of the relicensing process for the Hawks Nest Hydro project on The Dries of the New River in Fayette County, W. Va..

The project would divert 10,000 cubic feet per second of water from a five-mile stretch of river in order to generate 25-cycle power for West Virginia Alloys, Inc., a local smelting plant.

In its Nov. 20 filing, FERC requested that the hydro project's operator, Brookfield Renewable Energy Group, address in its proposed plan the need for studies of flow, fisheries, threatened and endangered species, and recreation.

In particular, the agency requested that Brookfield determine the acceptable minimum and optimal flows needed for whitewater boating between the dam and the powerhouse at Glen Ferris.

The operator will file its proposed study plan by Jan. 5. Stakeholders will meet to discuss it in early February and will be able to submit their comments until early April. The company will then submit a revised study plan, with another comment period, before FERC hands down its decision on the required studies on June 4.

## Lead Found in Chattanooga Soil

In November, health investigators found elevated lead levels in soil samples from downtown Chattanooga neighborhoods. The discovery came as state and federal regulators were removing contaminated soil found earlier in the Southside neighborhood. Of the more than 80 properties sampled, 52 were found to contain lead in amounts higher than the safety cutoff of 400 parts per million. A meeting of the city's Housing and Public Safety Committee has been called to keep city leaders and residents fully informed of progress and any potential hazards. The meeting will be set either Dec. 11 or 18.

## TDEC Dismisses Fracking Concerns

In 2012, the Tennessee Department of Environment and Conservation wrote new rules for fracking and solicited public feedback on proposed natural gas drilling regulations. But the state's NewsChannel 5 team found that state worker Michael Burton wrote derisive notes on some emailed comments that expressed environmental concerns. One comment was labeled "stupid" and another said "No No No hey hey goodbye." When "NewsChannel 5 Investigates" asked Burton whether TDEC has a culture that discounts environmentalists, he said it did not. TDEC issued a statement saying it values public comment and that it spoke to Burton about his actions, but did not formally discipline him.

## Recycling Plans

After the closure of a 100-year-old sorting plant in March, the Recycling Task Force of Kanawha County, W.Va., is examining programs of similar-sized municipalities including Raleigh County, N.C., and Roanoke, Va., for ideas to revive their struggling recycling program.

## This Solar Home Goes to Market

Deltac Homes, a leading sponsor of Appalachian State University's Solar Homestead Project, has signed an agreement with the university to market and manufac-

ture the student-designed, award-winning, net-zero energy home.

## Fracking A Nuclear Neighbor

Pennsylvania authorities granted Chesapeake Energy a permit to drill for natural gas with hydraulic fracturing methods less than one mile from the Beaver Valley Nuclear Power Station in Shippingport, Pa.

## EPA Unveils "How's My Waterway" Tool

Just enter your town at [watersgeo.epa.gov/mywaterway/](http://watersgeo.epa.gov/mywaterway/),

or let the tool find your location, and you can determine which of your local waterways are polluted and what's being done about it.

## Granting Justice

The U.S. Environmental Protection Agency is soliciting grant proposals for non-profit organizations seeking to conduct research, provide education and develop solutions to health and environmental issues in communities overburdened by pollution. Deadline Jan. 7. For more information visit: [epa.gov/environmentaljustice/grants/ej-smgrants.html](http://epa.gov/environmentaljustice/grants/ej-smgrants.html)

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## Environmental Writing Award Accepting Submissions

The Southern Environmental Law Center is accepting submissions for its annual Reed Environmental Writing Award for writers who "most effectively raise awareness of the value and vulnerability of the South's natural heritage through environmental stories." The contest has two award categories, non-fiction books and journalism. All submissions must have been published during the 2012 calendar year and should relate to the natural environment in at

least one of the following states: Alabama, Georgia, North Carolina, South Carolina, Tennessee, or Virginia. Contest judges include Grammy-nominated poet Nikki Giovanni and Bill McKibben of 350.org. The two category winners will receive \$1,000 each, and will be announced during the Virginia Festival of the Book in March. Submissions must be postmarked by Jan. 2, 2013. For complete submission guidelines, visit [southernenvironment.org/phil\\_reed](http://southernenvironment.org/phil_reed).

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# Hiking the Highlands

## Push to the Pinnacle

By Molly Moore

Pinnacle Park lies less than three miles from North Carolina's oft-traveled Great Smoky Mountains Expressway. Unannounced by roadside signs, its network of trails explores the lookouts, ridges and valleys surrounding bubbly Fisher Creek. The creek's headwaters, formerly the town of Sylva's drinking water supply, are also the reason why these 1,100 acres are protected for public enjoyment.

Today, Pinnacle Park features about 15 miles of trails, ranging from strenuous to easily accessible. Five campsites provide solitary settings for backcountry users, but most visitors come for the varied day hikes, particularly the treks to the park's two prominent overlooks.

The strenuous 3.5-mile path to the park's namesake viewpoint, the Pinnacle, begins as an old logging road along Fisher Creek. As the main trail plows uphill on the west side of the creek, off to the right a separate half-mile trail gently meanders back and forth across Fisher Creek in an area that's rich with seasonal wildflowers. "There are places where you'll see trilliums blooming as far as the eye can see," says park aficionado Jay Coward.

About a half mile from the parking lot, the trail diverges into the East Fork Trail and West Fork Trail, and Pinnacle-bound hikers typically head west. From here, it's another half mile to Split Rock — a towering, unmistakable, cracked boulder.

Along the trail's lower reaches,

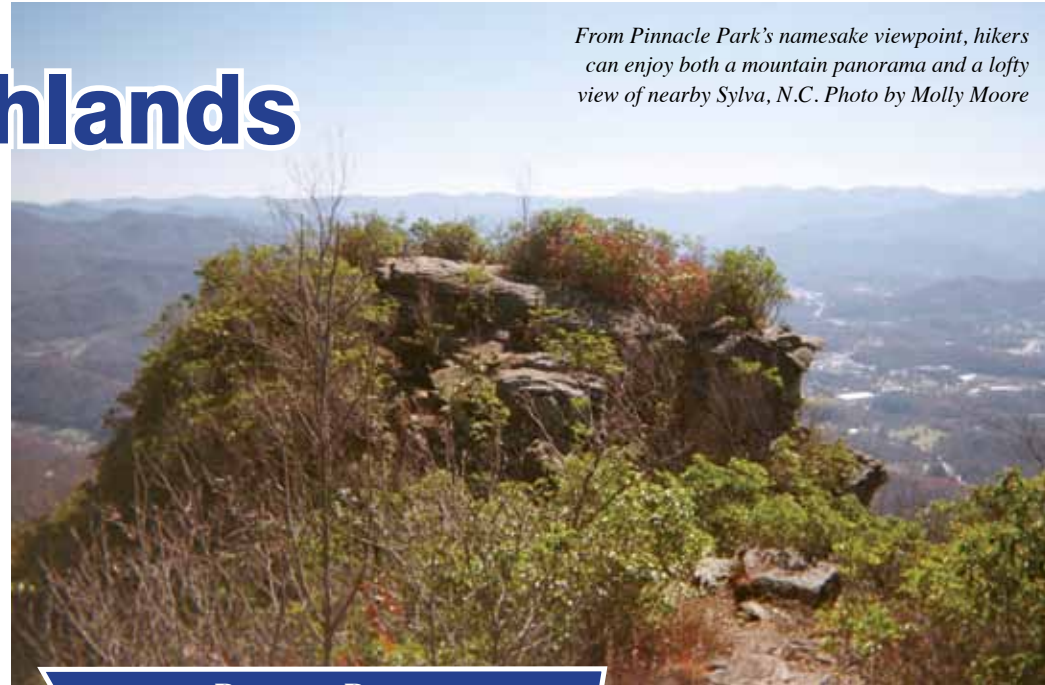
there are ample opportunities to relax on a rocky perch near the stream. Once the trail crosses Fisher Creek above Split Rock, it moves out of sight of the creek and begins to march upward; a backward glance through the leafless winter forest reveals a panorama of the Plott Balsams, a range within the Blue Ridge Mountains south of the Great Smokies.

By this point, hikers accustomed to more sedate trails might be wondering whether the old logging road's relentless climb will soon subside. It doesn't — not until the last mile.

At times, the wide trail is stubbornly rocky and rugged.

Good hiking shoes are a must, and some adventurers might also want hiking poles, particularly in winter when the path can grow increasingly icy and snow-covered during the ascent. The steep trek makes this a lively winter warm-up, so hikers might want to bring a backpack to hold the layers they're likely to shed during this portion of the hike.

Kirk Childress, store manager at Blackrock Outdoor Company in Sylva, advises hikers to plan for a temperature change of about 10 degrees from bottom to top. He also suggests that hikers give themselves ample time in case they are slowed down by the trail's rough foot-



From Pinnacle Park's namesake viewpoint, hikers can enjoy both a mountain panorama and a lofty view of nearby Sylva, N.C. Photo by Molly Moore

### PINNACLE PARK

**DIRECTIONS** — From US 74 W/Great Smoky Mountains Expy., turn right onto Steeple Rd. Make a quick right onto State Rd. 1527, then a left on Old 19-23/Skyland Dr. After half a mile, turn left on Fisher Creek Rd. Park is at the end of Fisher Creek Rd.

**LENGTH** — Reaching the Pinnacle via West Fork Trail is 3.5 miles; the park has 15 miles of trails

**INFO:** (828) 586-2719

ing and sometimes-severe incline.

Those who make this trek should be grateful for the laborers behind the original logging road, the area residents who made the case for conserving this land, and the volunteers who built the present trail system — people like local lawyer Jay Coward.

Coward first hiked to Pinnacle Park's Blackrock overlook at age 10. When new water regulations led the town of Sylva to stop using the Fisher Creek watershed as a drinking water source in 1990, several area residents, including Coward, formed Pinnacle Park Foundation, Inc., and advocated for the park's formation.

At one point, the foundation received a request from the town board to harvest timber from the property, which the foundation denied — later, forestry students determined that removing timber wouldn't be cost-effective. After that close call, the town and park foundation set up a conservation easement with the regional nonprofit organization Land Trust for the Little Tennessee to permanently protect the land.

Occasionally the bare winter woods reveal scattered stacks of downed, moss-covered trunks, hinting at the

challenges that faced volunteer trail builders. "Back in the '70s, the balsam woolly adelgid arrived and started gobbling up mature Fraser firs," Coward says. "[The pest] didn't kill young Fraser firs, so when they had canopy openings they just sprang up through all this downfall. It was impossible to get through. We just had to chainsaw our way where the old trail was."

About two miles from the trailhead, a sign marks the West Fork Trail's split — from here it's 1.4 miles to the Pinnacle, and 1.9 to Blackrock, another above-timberline rock outcropping. The popular overlook, and its 360-degree view of the southern Appalachians, is also accessible by a moderate hike from the Blue Ridge Parkway's Waterrock Knob Visitor Center, or by taking the East Fork trail from the parking lot.

From the fork, the path to the Pinnacle levels off, hugging the mountain's contours before exiting the tall forest and entering an expanse of rhododendron and mountain laurel. The trail appears to end amidst a stand of shrubbery, but a narrow, descending footpath breaks off to the left. It weaves through the rhododendron thicket and then opens to a wide view, with the Pinnacle protruding from the mountain like the bow of a ship.

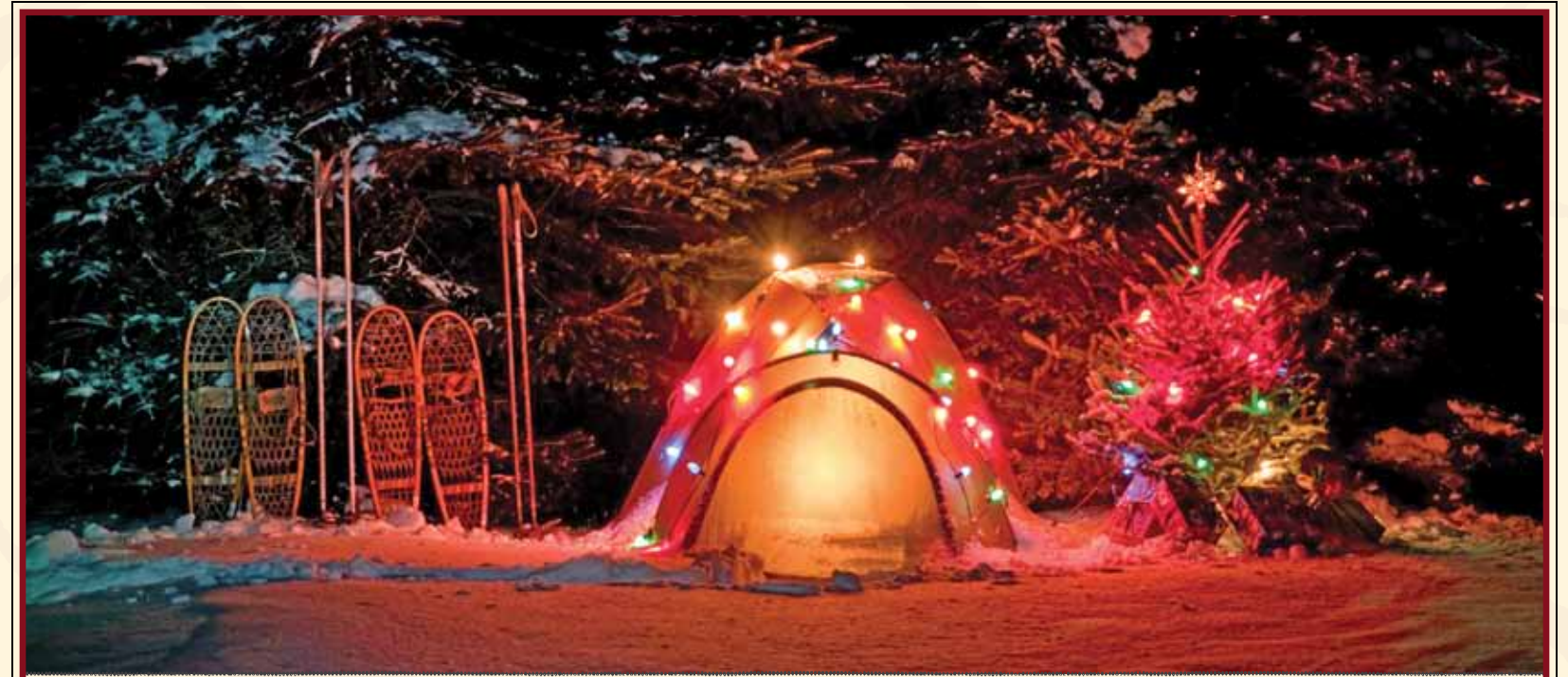
The Pinnacle offers a 280-degree view of the Plott Balsam range, with the town of Sylva nestled among the forested mountainsides. "It's not as high [as Blackrock], but it's more intimate," Coward says of the viewshed. "You feel like you're more in a community from the Pinnacle."



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# Naturalist's Notebook

## They're Here: Alien Species in Appalachia

By Matt Grimley

Anything that costs \$120 billion every year to control can't be good.

That's just one estimate of the costs of invasive species in the United States, courtesy of the Rocky Mountain Research Station. In Appalachia, the everyday costs are more apparent: the smear of house sparrow droppings on your windshield, the garlic mustard that fills your yard, the anthracnose wilting your dogwood's leaves.

And that's not even the half of it.

### Just Shoat Me

They estimated it would supply 500 to 700 pounds of sausage. The feral hog, dubbed "Monster Pig," was shot nine times by an 11-year old boy in Alabama who wielded a .50-caliber revolver. The prodigious pig weighed 1,050 pounds and measured over nine feet long.

Picture that humongous ham and you might get an idea of the enormous problem that feral pigs — known as shoats when young — pose in the United States. From populating a few states such as Hawaii and California, they flourished to over five million nationwide, snorting their way through at least 35 states, where they cause over

\$1 billion in damages and control costs every year.

The Great Smoky Mountains National Park knows all about them. In 1912, a hunting preserve on Hooper's Bald in North Carolina received a shipment of European wild boar, which flourished on the land. When the reserve went bankrupt in 1920, locals hunted off some, but many hogs escaped.

By the 1970s, wild hogs had taken over the park. In the intervening years, the wild boars coupled with domesticated pigs. Still lean and tusked like European wild boars, wild hogs today also show spots, short snouts and curly tails.

Some might call these hybrid pigs "cute," but they effectively churn the earth, squashing seed growth, dredging up soil communities and vegetative cover, and devouring almost anything, including the unique Jordon's salamanders,



Brown marmorated stink bugs circle an unsuspecting apple. When feeding on these tree fruits, the insects cause catfacing, a deformity that makes the fruit unmarketable. Photo by Tracy Leskey, courtesy of the Appalachian Fruit Research Station

remove about 300 wild hogs a year via hunting and trapping. According to him, that's considered "maintenance level" for the population.

"With the existing manpower, we're doing a pretty good job keeping them down to that low level," he says.

He says that the hogs are more reproductively-talented than even the white-tailed deer: they can breed at six-months old and have two litters per year, with three to eight piglets per litter. And if the swining-and-dining wasn't enough, hunters are also suspected of moving the hogs illegally, which may account for new populations in the mountains of North Carolina and Tennessee.

Remember Monster Pig?

Turns out its name was Fred, and he was a domesticated pig that a commercial hunting preserve bought and passed off as wild. Fred's previous owners said the

*Continued on next page*

## Japanese Knotweed

The recipe: Harvest only the tender young shoots of the Japanese knotweed. These are found in the spring, and they are no larger than six to seven inches tall. The shoots look similar to asparagus and if they have been growing up through last year's leaves, they may be white to light green in color. Wash the shoots and snap them into smaller pieces for a stirfry. To saute, toss in a pan with a light coating of sesame oil and tamari and a small amount of fresh-ground ginger. For added oomph, add minced garlic. Cook for three to five minutes on medium heat and serve immediately, perhaps with freshly cooked jasmine rice and locally farm-raised chicken!"

If you're still hungry, go to [www.appvoices.org/thevoice](http://www.appvoices.org/thevoice) for more invasive recipes!



Kudzu basket, photo courtesy of Nancy Basket

## Naturalist's Notebook

*Continued from previous page*

lovable loaf loved playing with children and eating cans of sweet potatoes.

### Smells of Cilantro

Nobody invited it. The brown marmorated stink bug first showed up in Pennsylvania in the late 1990s, probably having hitchhiked on some crates from China or Japan. Since dropping in on Maryland in 2003 and West Virginia in 2004, it has spread to 39 states across the country.

This stinker is 1.7 centimeters long and shaped like a shield, characteristic of many stink bugs. Over its brown back are marmorated (or marbled) patches of off-white, black, blue and copper. When threatened, the bug releases a cilantro-like smell.

The brown marmorated stink bug, with its sucking proboscis, can eat over 100 recorded food sources, including tree fruits, berries, ornamental trees, and row crops such as corn and soybeans. "It's not a fussy eater," says Tracy Leskey, a research entomologist who works at the U.S. Department of Agriculture's Appalachian Fruit Research Station in Kearneysville, W. Va.

2010 was by far the worst year for these stinkbugs in Appalachia, she says. In particular, the noisome nuisance devoured apples like they were going out of style. Many growers lost up to 80 percent of their apple crops and had to choose between selling a pittance or not even harvesting.

This year, Leskey says, her research team has made progress in identifying the pheromone of brown marmorated stink bugs. With this perfume in hand, they hope to bait a trap to capture and monitor the bug's populations. Other ongoing efforts include researching possible native predators such as praying mantises and parasitoid wasps, as well as providing farmers with monitoring equipment so that they can be timely in their pest management.

For those who find a brown marmorated stink bug, Leskey suggests that if you're in a state without an official population, submit the sample to your local land-grant university or state department of agriculture to have it confirmed. You can look on [stopbmsb.org](http://stopbmsb.org) for more information. Second of all, don't panic — it's good to identify a population.

This busy bug, along with other invasives like spotted wing drosophila and kudzu bugs, are changing the dynamics of pest management by targeting crops that haven't been attacked before. "We didn't have to worry about this in the past," says Leskey.

### Vining For More

As if by pure muscle, kudzu strangles a landscape, blanketing trees,

### Exotically Appalachian

The more (invasives) you know:

► **European starling:** Released in 1890 by a Shakespeare lover, its murmuration pecks up over \$800 million in agricultural damages every year.

► **Multiflora rose:** Not a rose by any other name; this Japanese import fills 45 million acres of fields, pastures and forest edges with impenetrable thickets.

► **Kudzu Bug:** It sucks out the juice from soybean crops and smells awful when touched, but it controls kudzu ... we're grateful?

► **Tree-of-heaven:** Prolific seed production and rotten-peanut butter smell only add to the charm of this aggressively growing Chinese tree

► **Beech bark disease:** An insect eats the bark, the fungus infects the wound, and the important forestry tree, the American beech, enjoys nature's use of teamwork.

shrubs and grass with green as it reaches out to the sunlight. The vine, with three million hectares in the United States already under its belt, continues to swallow 50,000 hectares a year, mostly in the Southeast.

According to the U.S. Army Corps of Engineers, the Eastern U.S. should anticipate that the effects of climate change will bring higher temperatures and higher CO2 levels. Combined with increased natural habitat fragmentation, these changes all favor kudzu's aggressive, foot-a-day growth and could signal a warning for cooler, higher-elevation locales like Appalachia.

It can take about \$5,000 per hectare per year to control kudzu. And sure, a person can control it by digging up and eradicating its extensive root system and selectively spraying it with herbicides. But people like Nancy

Basket in Walhalla, S.C., have a different idea.

"Since it's growing in a ravine in the back of my house," says Basket, "I use it out of self-defense."

Dedicated kudzu crafters are able to make lamp shades, insulation, sculptures, paper from the leaves, barns out of dessicated bales, clothes, soap from the root (which also might, according to a Harvard study, be used to curb alcohol consumption).

"You can even eat kudzu," Basket says.

Kudzu first shipped over from Asia in 1876. At first propagated to control soil erosion, with the federal government paying many farmers to plant it, it was eventually recognized as a pest weed by the U.S. Department of Agriculture in the 1950s.

From her shop, where she's been for 16 of her 32 years in the kudzu craft, Basket chooses only vines that are thumb-width or thicker to make her baskets. By coiling and sewing the vines together, the traditional Cherokee style, she is able to create art and celebrate her Native American heritage simultaneously.

She teaches her art to all grades and ages, visiting schools, working at museums, and giving presentations to anyone who'll listen. "If I blaze a trail through kudzu, maybe others will do it, too," she says. "And then we won't have to fight it. We can live with it. Get fed, live in it, use it for containers, a home. What else do you need?"

One can only hope that her teaching grows faster than the kudzu.

### Non-Native and Delicious

Remember: you can eat invasives, too! One of our readers, Amy, was gracious enough to provide a stirfry recipe for Japanese knotweed. She writes,

"I first foraged for this invasive in its native country of Japan, where it was growing wild next to streams in the high mountains of the Japanese Alps, as myself and a good friend were backpacking through the wilds of Mt. Myoko. The plant is Japanese knotweed, or *Fallopia japonica* (which was previously known as *Polygonum cuspidatum*). In the U.S., it is a terrible invasive that clogs riparian areas, choking out our lovely native species.

I would caution readers from harvesting Japanese knotweed if it is unknown whether the plants have been treated with pesticides. As this is a very difficult invasive to control, the plant often has to be treated year-after-year to be fully eradicated.

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# Global Connections

## Busting the Myth of Appalachia's Isolationism



By Jamie Goodman

Appalachian history is full of misleading stereotypes and misrepresentations, but none could be more inaccurate than the myth of isolationism.

As far back as the earliest explorers, European immigrants to Appalachia participated in a burgeoning global market. Frontiersmen such as Daniel Boone and Simon Kenton earned their keep hunting and trapping in the wilds of the Appalachian mountains, selling deer, beaver and other furs to traders who would transport them to port cities such as Baltimore, Md., or Charleston, S.C., and then on to the hands of European citizens who prized the exotic items.

Even in the late 1600s, Native American tribes who interacted with the first foreign explorers quickly grasped that they were interested in New World commodities, and traded pelts for European-made goods. Settlers to the area also saw economic opportunity in the abundant land; greed over these resources was one of the factors that would ultimately force the Native Americans out.

"There is a political sociologist who argues that settlement of the mountains was driven by some sort of capitalist forces," says Dr. Pat Beaver, director of the Center for Appalachian Studies at Appalachian State University. "We know that the fur trade was a big driver for exploration, and if you go back to the very earliest exploration, it was the quest for gold."

When pioneers began to settle the mountains, they immediately began farming and wildcrafting native herbs to sell to intermediary traders in exchange for more cultivated overseas goods.

"If you look at old store records from the early 19th century, you've got coffee and tea and ginger, nutmeg, silk and china, and those were all part of this international trade," says Beaver.

Ginseng was among the first wild mountain goods that made it to markets



Goods we take for granted today, such as spices, sugar, silk and coffee, were once signs of the early global trade system. This collage of accounts from Valle Crucis, N.C.'s Taylor and Moore Store ledger (1861 to 1874) also includes a line for the opium-based laudanum, a common pain reliever and overall remedy used during the time period; the opium to make this would have likely come from Britain or China. Images courtesy of the W.L. Eury Appalachian Collection, Appalachian State University

around the world, reaching China by the late 1700s. The prized herb may also be one of the earliest examples of Appalachian resource exploitation. According to the historical tome, "First American Frontier: Transition to Capitalism in Southern Appalachia," by Wilma Dunaway, merchants from the Virginias "exported ginseng, yellow root, mayapple root, and snakeroot for nearly ten times the value they allowed local customers in barter."

"One western North Carolina merchant exported 30,000 pounds [in one year]," Dunaway writes. "By 1840, Appalachian Ginseng was becoming scarcer, but the region exported \$83,273 worth of the herb in that year — nearly one-fifth of the country's total supply."

According to Dr. Beaver, other markets were tied into the flourishing New World economy, including a triangular trade route that brought slaves from Africa and rum from the Caribbean in exchange for Appalachian goods.

### The Extraction Revolution

Almost from the time pioneers started exploring the Appalachian mountain range, minerals were being extracted from the vaulted hillsides. Dunaway writes that saltpeter (used to produce gunpowder), alum (used for canning), salt from West Virginia, manganese from Southern Appalachia, lead from southwestern Virginia, gold from Georgia and Tennessee, and copper from Maryland, Virginia, North Carolina and Georgia were all part of the initial rush to mine underground mountain resources for profit. Even Appalachian mineral water was bottled

and exported to distant markets.

By the early- to mid-1800s, coal was already established as a key commodity in both domestic and international trading. According to Dunaway, in the 1840s close to three-quarters of a million tons of Maryland coal were being exported to Cuba and France. By 1860, "four-fifths of the region's coal was being sent to regional, midwestern, and southern markets" to power foundries, fuel salt manufacturing, and propel steamships on the fledgling country's mighty rivers.

But it was the advent of the railroads that truly established Appalachia's role in modern world trade. "I'd say that period of 1880s to 1920s is a real big, radical change in terms of [timber and coal]," says Beaver. "By the 1880s, things were really moving."

According to "First American Frontier," timber exports to places such as Western Europe and the West Indies swelled in the mid-19th century because "they had already cut their own timber." Dunaway writes that "From the Clinch Valley of upper East Tennessee and southwestern Virginia, 1,000 rafts per year headed south for reexport out of Knoxville and Chattanooga." Massive logging took place throughout the southern Appalachians, with one company from Maine heavily lumbering as far south as the north Georgia mountains and exporting the timber through Savannah, helping to establish it as a major port city.

Following the railroad revolution, a new commodity was being imported into the region. Coal miners from Wales arrived in Appalachia, followed by Irish, Polish, Czechs and Greeks, among others, all looking for work and a new beginning in the region's coal mines.

"[You had] political upheaval or

drought or famines or wars driving out migration from Europe, and then the opportunities and the lures of expanding markets and industries [were] bringing people in," says Beaver. "They're the same kind of drivers that are happening now. People are following the industries and the industries are going where labor is inexpensive."

### Flash Forward

In this issue of *The Appalachian Voice*, we take a look at globalization as it has evolved to the present, and how Appalachia fits into — and influences — the international community. Through the bluegrass music revolution of the 1970s and the Latino migration of the 1990s, to the furniture crash of the 2000s, the rebirth of small farms following the demise of the tobacco industry and the rise of community activism in the face of mining issues, the seemingly microcosmic culture of Appalachia continues to have a larger-than-life presence in the world.

Recently, scholars, activists and artists from more than 60 countries — including Ecuador, Wales, India, Pakistan, Indonesia, Sri Lanka, Mali, China, Italy, Canada, Mexico and the U.S. — gathered at a three-day Global Mountain Regions conference at the University of Kentucky to talk about their shared experience of living in mountain communities that have struggled with resource extraction and other exploitation as part of the modern global market.

"For the future well-being of Appalachian communities, I think it will be very important to be in conversations with mountain communities around the world," says Dr. Ann Kingsolver, co-organizer of the event and director of the university's Appalachian Center and Appalachian Studies program. "I think the exchange is vital as we go forward."

# Finding a Common Language

By Matt Grimley

Lucy Hoffman hears her cell phone buzzing at all hours. At Avery Amigos, a nonprofit dedicated to bridging the gap for the Latino community in northwest North Carolina, she assists Hispanic women and their families with a little bit of everything, including hospital bills, apartment leases, reliable transportation and English-learning classes.

The trouble is, she's one of the only people doing this work, and it's with a population that continues to grow.

From behind her cluttered desk, Hoffman waved a copy of a ticket. "280 dollars!" she exclaims. "That's how much they fine you for not having a driver's license!" That amount can make or break many Hispanic families' budgets, she says.

According to a 2011 report from the Appalachian Regional Commission, Latinos account for 4.2 percent of the total Appalachian population, or over one million people. That's up from one percent of the total population in 1990.

Their population doubled between 2000 and 2010, with more than 300 Appalachian counties experiencing an increase in Hispanic population that matched or exceeded the national average. Where Hoffman works, in Mitchell, Watauga and Avery counties, the Latino population has increased by 133 percent in the past decade, from 1,346 in 2000 to 3,141 in 2010.

Hoffman, who's originally from Brazil, hopes that legislation will pass that will allow undocumented immigrants to test for driver's licenses. That way, families can safely transport their kids to school, get to work and buy groceries. As things are now, those without licenses are afraid to drive anywhere, she says, and the road stops that police officers are known to set up near Latino neighborhoods certainly don't help.

### Defining Latinos in Appalachia

A 2007 study from Macalester College found that in 2000, foreign-born Hispanics comprised 49 percent of the Hispanic population in Appalachia, with the majority coming from Mexico, and lesser numbers coming from Europe, the Caribbean, and Central and

South America. The remaining 51 percent, native-born, moved to Appalachia from another part of the United States, mostly the South.

Transplants from Latin America are settling in Appalachia in places with specific industries, says Dr. Barbara Ellen Smith, a professor of women's and gender studies at Virginia Tech. Places such as eastern Tennessee with its poultry processing and western North Carolina with its Christmas tree farming are seeing booms in Latino population.

The immigration process for these workers isn't a free-for-all, either. "You don't get a visa to enter the United States to work unless you are highly skilled and you have an employer backing you," Smith says. "[This] just doesn't happen for ordinary folks."

Due to a 25.3 percent poverty rate among Latinos nationwide in 2011, according to the U.S. Census Bureau, community doesn't come easy for many Latinos, let alone in rural Appalachia. As one resident surveyed for a 2010 Appalachian State University report says, "Yes, we want to be together and help each other but it is hard to do that when we are all struggling."

Faith-based groups and social services are often the first to lend a helping



## Appalachian Latinos Strive for Integration

Lucy Hoffman, pictured at her desk in Linville, N.C., is one of the few people working to help Latinos integrate into communities in northwestern North Carolina. Below, Derdlim and Rob Masten of Elkins, W.Va., with their child, shortly after Derdlim obtained U.S. citizenship in 2008.

hand. But in places where there is a sufficient concentration of Latinos, such as Siler City, N.C., Smith says, those residents develop the communities themselves, creating Hispanic festivals and other forms of outreach and support.

In places such as Morristown, Tenn., there is local resistance to Latinos from groups such as the border-patrolling "Minutemen," but there is also expanded food selection at grocery stores, multilingual signage in local businesses and unionized Latino poultry workers, whose successful struggles were catalogued in a 2007 documentary called "Morristown: in the Air and Sun."

### Learning to Dance

A person eating at El Gran Sabor in Elkins, W.Va., should order the cachapas. It's a traditional Venezuelan dish, pancake-like and made of corn, egg, butter and milk. "It's our most popular dish," says Derdlim Masten, who co-owns the restaurant with her husband Rob.

Derdlim is originally from Venezuela. She first met Rob in 2000 when she was visiting her cousin in Randolph County, where Elkins is located. Rob was a West Virginian, a music teacher for a local school and a saxophone player for a Latin band.

Six months after they first met, Rob

asked Derdlim to teach him how to dance. They hit it off, she speaking little English, he speaking little Spanish. Instead, says Masten, "we communicated by dancing."

They married in 2002 and started their restaurant soon after. At first, things were a little tough at El Gran Sabor, whose name translates to "The Great Flavor." Because many potential patrons had the heavily-Americanized Mexican palate, Masten had to offer burritos and tacos. "It was hard for me to convince them that I'm not Mexican," she says.

Now, El Gran Sabor can offer a full Venezuelan cuisine and vegetarian options with no downturn in business. Masten says there are not many Latinos in town — the last census counted 75 residents out of 7,094 — but now "more people know about the Latin people" in Elkins.

Masten responded emphatically when asked whether her husband now knows how to dance. "Oh, yeah!" she says. "He's a professional."

The hills and hollows of this region have always been more diverse than people think, and Hispanics are only the latest group in Appalachia to ask for the possibilities of social and economic mobility. As Dr. Barbara Ellen Smith says, "It's not just an immigrant question — it's a class question."



# A Clean(er) World Forecasting America's Role in the Energy Future

By Molly Moore

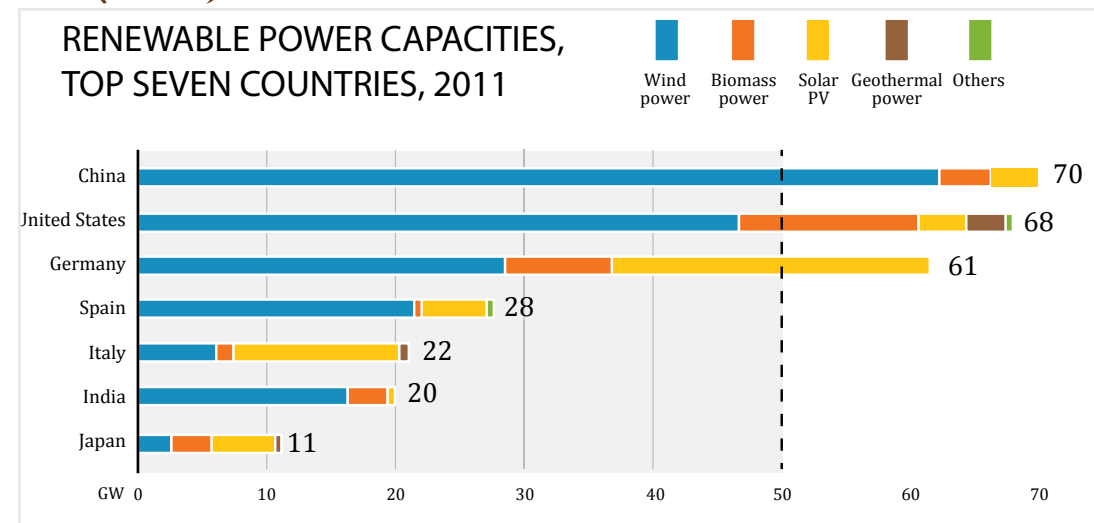
No country is an energy island.

In the face of a European Union sanction that bans steel imports, Iran is using roundabout trading methods to secure metallurgical coal, used in steel manufacturing, from Ukraine. A state-backed firm in Abu Dhabi plans to invest in Saudi Arabia's growing renewable energy efforts. And in May, a state-owned Chinese company disclosed plans to buy Triple H Coal Company, which operates in Campbell County, Tenn., marking the first time a Chinese company invested in American coal.

That America and Appalachia's energy consumption and output are tied to international forces should come as no surprise. Immigrants from the British Isles and Eastern Europe who came to Central Appalachia to work in the coal mines knew that in the 19th and 20th centuries. Today, as nations develop, technology advances and policies shift, the international energy landscape is changing, as is America's place in it.

Like sea level and human population, the world's appetite for energy is rising. Without significant changes in policy, such as a worldwide push towards energy savings, global electricity demand will increase over 70 percent from current levels by 2035, the International Energy Agency projects. Renew-

## RENEWABLE POWER CAPACITIES, TOP SEVEN COUNTRIES, 2011



Charts courtesy of Renewable Energy Policy Network for the 21st Century

able sources of power are expected to account for half of new worldwide energy capacity. Coal's share of overall electrical generation is projected to decline from two-fifths to about one-third, putting it on par with the amount of power expected to come from renewables.

The percentage of U.S. electricity coming from coal is already close to that one-third prediction, a record low, but the country will need to make significant gains in renewable energy in order to fall in line with the projected global average by 2035. In 2011, America derived about 9 percent of its energy from renewables, while Germany used renewable sources to produce 20 percent of its energy.

Looked at another way, however, America doesn't seem so far behind. At the end of 2011, the United States was second after China in total renewable energy capacity, according to a report by

public research and advocacy organization The Pew Charitable Trusts.

### Follow the Clean Money

"I don't think [the United States] gets enough credit for leading in many, many ways in renewable energy," says Richard Caperton, director of clean energy investment for think tank Center for American Progress. He notes that the field of renewable energy is diverse and encompasses manufacturing, project development, deployment and financing. Compared to other nations, the U.S. is strong on some of those fronts and falls behind in others.

Caperton says America is great at "getting concrete and steel in the ground" by planning and installing wind turbines and solar farms. Compared to China, America also does well at integrating alternative energy sources with utilities. Though it's difficult to track information on China's power system, he says, the country continues to build wind farms and solar arrays that aren't connected to the grid.

"Our banks and venture capital investors and private equity investors are, I think, world leaders in their knowledge of the field and in their willingness to finance renewable energy projects both domestically and abroad," he says.

The U.S. invested \$48.1 billion in clean energy in 2011, more than any other nation. The Pew Char-

itable Trusts attribute that dramatic increase in clean energy investment to the fact that entrepreneurs and financiers were making the most of government policies that expired at the end of that year.

Following that boom, growth in clean energy investment slowed in both America and around the world. In the third quarter of 2012, those investments were 20 percent lower than they were a year ago, reports research company Bloomberg New Energy Finance. Bloomberg attributed the global drop to uncertain clean energy policies in countries such as the U.S. and United Kingdom.

Caperton says most countries at the forefront of the clean energy field benefit from policy certainty — dependable tax incentives, loan guarantees and state renewable energy goals. "[Those countries] have a general commitment to low-carbon power sources that feeds into every decision they make in the power sector," he says. "If they know they want to have a zero-carbon fuel mix by 2050, they're able to plan today for that future and that really helps their investments."

### Making and Trading the Energy Future

One of those areas where the U.S. is doing fairly well but could improve is renewable energy manufacturing — making the photovoltaic cells, wind turbine blades and countless other building blocks of clean energy technology. With the International Energy Agency projecting that the amount of power generated from renewable sources will be three times greater than 2010 levels by 2035, manufacturers see a big opportunity.

China currently leads the world's solar and wind energy industries. Of the top ten wind manufacturers in 2011, four are Chinese companies and one, GE Wind, is American, reports international

Continued on next page

## A Clean(er) World Continued from previous page

organization Renewable Energy Policy Network for the 21st Century.

"Where China does really well is a strong national commitment to providing financial incentives for manufacturing," Caperton says. "Every country, eventually, will be transitioning to low-carbon power and China wants to manufacture that for the rest of the world. So they're making strong commitments today to set themselves up to be the future manufacturing leader."

That support is so strong that the U.S. brought a trade case against China to the World Trade Organization alleging that the Asian country provided unfairly large subsidies to its solar manufacturing industry, allowing Chinese solar companies to sell their product abroad below the cost of production. The U.S. recently imposed tariffs on Chinese-made solar panels to help protect domestic companies.

John Smirnow, vice president of trade and competitiveness for the Solar Energy Industries Association, says the best estimates show a nearly equal trade balance between Chinese and American solar companies. The trade case is beginning to have a negative ripple effect on American manufacturers, he says, since the Chinese government is now more receptive to trade complaints against the U.S. And because the bulk of U.S. exports go to China, Smirnow says anything that harms their economy can hurt U.S. companies that depend on Chinese buyers.

He hopes the two powerful governments can resolve the issue through negotiations instead of further litigation or allowing the situation to escalate into

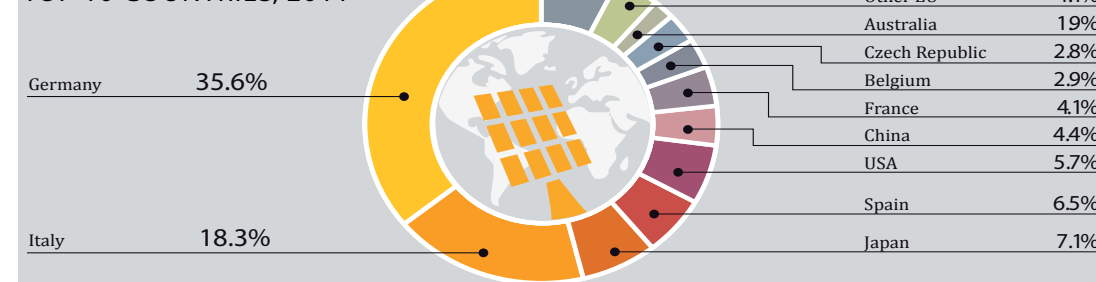
a trade war. "Solar is one of the more global industries that we have; it really is a global supply chain," Smirnow says. Two U.S. companies manufacture some of the best solar products available on the world market, he says, so customers looking for solar panels with the most efficiency and greatest longevity will seek out American goods.

Much of the solar supply chain also has roots overseas, in the naturally occurring elements known as rare earths. Most photovoltaic solar panels include the element indium, which the U.S. typically sources from China and Canada. That reliance is changing, however, as solar developers find new technologies — such as innovative uses of mirrors and molten salt — to complement conventional solar panels.

### Buying Time With Energy Savings

Regardless of where green technology is manufactured, the International Energy Agency forecasts that worldwide growth in clean energy is a certainty. Despite booms in renewable sources of power, however, the agency's calculations show that under current policies, emissions of heat-trapping greenhouse gases will lead to a long-term temperature increase of 3.6 degrees C (roughly 6.5 degrees F). Climate scientists and international bodies such as the World Bank and United Nations Environment Programme say even a 2 degree C (3.6 degrees F) increase will

## SOLAR PV OPERATING CAPACITY, TOP 10 COUNTRIES, 2011



lead to dire climate consequences; dry regions will become drier and wet areas will become wetter on a scale that risks food production and water availability while increasing the frequency of intense storms.

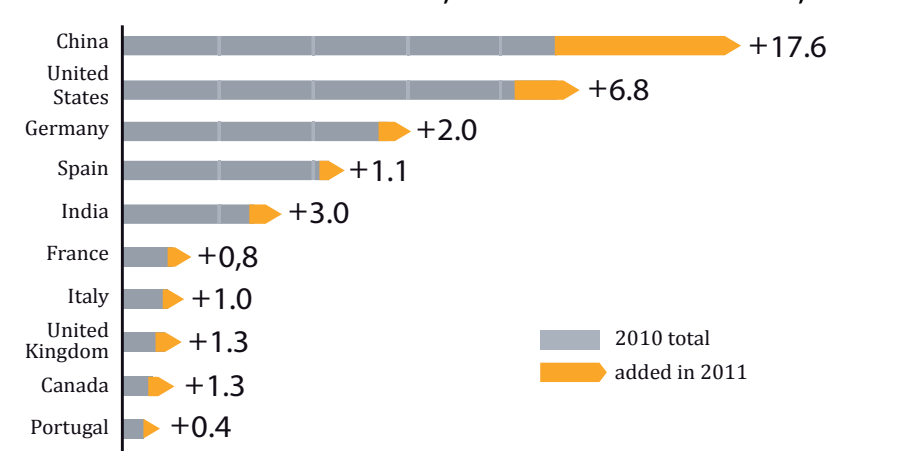
Based on the agency's projections, the amount of greenhouse gas emissions necessary to reach that dangerous 2-degree climate cliff will be "locked in" by 2017 unless nations around the world dramatically change course.

The report finds that if countries around the world invest in measures to decrease energy use, thereby decreasing the amount of pollution ejected into the air, that would give governments five more years to come up with an effective climate plan before temperatures increase to even more dangerous

levels. Under this scenario the agency estimates that overall demand between now and 2035 will increase only half as much as it would without policies to promote energy savings. And those gains in efficiency will boost countries' overall economic situation as well, the report projects.

Averting catastrophic climate change by upgrading energy infrastructure might be a worldwide task, but Caperton believes America's energy economy can play a significant role. "I'm optimistic about the U.S. being able to deal with every technical challenge that's out there. I think that my concern would be, 'Are we taking [climate change] seriously enough and are we going to actually do enough to address it?'"

## WIND POWER CAPACITY, TOP 10 COUNTRIES, 2011



# Uncharted Waters

## Trends in the International Energy Trade

The future of electricity generation might lie in renewable resources and energy efficiency, but fossil fuels still dominate today's power picture both in America and around the world. This map examines some of the projects at home and abroad that could impact the global energy trade.

By Molly Moore



### Mongolia

Beneath the Gobi Desert in southern Mongolia lies Tavan Togloi, one of the world's largest untapped coal reserves. The deposit has an estimated 7 billion short tons of coal, about 2 billion of which is metallurgical coal used in steel manufacturing.

To reach the world market, land-locked Mongolia must go through either Russia or China. The Chinese border is relatively close, but Mongolia's government is concerned that a Chinese contract could give their dominant neighbor too much influence. Other bidders include companies from Japan and Russia, plus St. Louis-based Peabody Energy. For now, Mongolia is weighing its options and will decide by mid-2013.



- \* The U.S. solar market will grow 71 percent in 2012, with American market share of global solar installations reaching over 10 percent.
- \* Top manufacturers of solar cells are China, Taiwan, Japan, Germany and the U.S.
- \* Worldwide solar industries employ about 1,760,000 people.



- ~ About 238 gigawatts globally were generated by wind power in 2011, and about 20 percent of installed wind power is in the U.S.
- ~ The U.S. is a net importer of wind power products, though the percentage of wind equipment that is imported is in decline. U.S. wind exports grew from \$15 million in 2007 to \$147 million in 2011.
- ~ Worldwide wind capacity is expected to increase by 107 percent between 2011 and 2016.

### Northwest Passage

As America's hunger for coal weakens, market-savvy companies are looking to South Asia, where demand remains strong. Wyoming and Montana's Powder River Basin, which produces over half of America's coal, could access Asian markets and be cost-competitive with fuel from Australia and Indonesia if coal export terminals are constructed along the Pacific.

The U.S. Army Corps of Engineers is reviewing permits for two terminals, which together would allow about 110 million tons of coal export annually, according to University of Montana's Dr. Thomas Power.

He says Northwest coal exports would lead to lower coal prices, encouraging increased coal-burning in Asia and discouraging further investments in energy efficiency. Concerned politicians, environmental groups, and an alliance of 57 tribes are asking the Army Corps to consider the cumulative global environmental impacts. Northwesterners are also concerned about increased train and barge traffic and the resulting coal dust pollution.

### A Fluid Situation

Five times more conventional natural gas was exported through U.S. pipelines last year than was shipped overseas as liquefied natural gas, but those liquid exports might be poised for a huge jump.

Exporting liquefied natural gas to countries that don't have free-trade agreements with the U.S. requires a federal permit. So far, one company has received a permit and is building an approximately \$3.6 billion gas-to-liquids facility in Louisiana.

Before considering more permits, the Department of Energy is studying how those exports could affect the nation's economy.

Opponents argue that international trade in liquefied natural gas will raise prices at home and escalate environmental damage from hydraulic fracturing, while advocates say it will be good for business and decrease China and India's coal use.

### Keystone XL

TransCanada Corporation's Keystone XL pipeline — which NASA climate scientist James Hansen has said could be "game over" for a stable climate — transports bitumen, a type of crude oil extracted from tar sands in Alberta, Canada.

If fully executed, the pipeline will expose the tar sands to the global market via the Gulf of Mexico's export terminals.

Part of the pipeline is operational, but in January 2012 President Obama denied a permit for a portion that would have crossed the Great Plains, home to North America's largest aquifer. TransCanada is seeking state and federal approval for an alternate Midwest route. In March, the president approved a section between central Oklahoma and the Texas Gulf Coast that is now under construction.

Opponents cite Keystone's environmental effects: pollution from massive open-pit mines, the potential for pipeline leaks, and the climate dangers of burning the world's largest tar sands reservoir. Critics also note eminent domain abuse.

### Falkland Islands

British company Falkland Oil and Gas recently discovered an estimated 25 trillion cubic feet of natural gas offshore from the Falkland Islands. The discovery, which has revived disputes between Britain and Argentina over the British territory's ownership, might lead to the construction of a gas-to-liquids facility and export terminals. In response to the discovery, Argentina said that it considers energy exploration off the islands illegal, and refuses to allow Falkland Island ships to use Argentinian ports.

### Appalachian Coal

Coal trade winds are picking up speed and could gust harder in the coming years. In 2011, over 11 percent of coal produced in America headed abroad.

Midway through 2012, that figure was up to 13 percent.

The 107.3 million tons exported in 2011 was the highest amount ever, twice as much as the U.S. exported in 2009. Most of that coal came from Appalachia, where mountaintop removal coal mining occurs, and the bulk of it went to Europe, where the Netherlands consumed the most. See the full story on page 22.

### Mozambique

Mozambique exported less than 6,000 short tons of coal in 2010; Brazilian company Vale exported over 140,000 short tons from one Mozambican mine in 2011.

The sudden increase in the nation's exports is overwhelming ports, which can handle just 35 percent of their current loads. Exports are expected to rise to 110 million short tons annually, as Mozambique's coal reserves hold an estimated 25.4 billion short tons. Seventy percent of that is expected to be metallurgical coal, which is used in steel manufacturing.

Several days after the prime minister announced the Vale's 2011 export figures, 500 people protesting the company and the government blocked the road from Vale's mine to the port, reported the Mozambican paper *Noticias*. The protesters' homes had been relocated to make way for the mine complex, and they asserted that the company had not kept its promises of assistance.

### Israel

Over the past two years, natural gas companies have discovered Israeli offshore reserves of more than 28 trillion cubic feet. According to some calculations, that could meet Israel's needs for 150 years at current consumption rates.

Whether to export the gas is a contentious question. A recommendation by Israel's energy ministry to allow up to 18 trillion cubic feet in exports was criticized by the environmental ministry, which wants more domestic gas to lessen the country's dependence on coal and oil.

The issue is compounded by maritime security concerns and ownership questions over gas seams that cross international lines.

*Sources include: American Wind Energy Association, Bloomberg, Businessweek, Forbes, Global Wind Energy Council, MercoPress, MiningReview.com, MiningWeekly.com, NaturalGasAmericas.com, Platts News, Renewable Energy Policies for the 21st Century, Reuters, Solar Energy Industry Association, U.S. Energy Information Administration, YNetNews.com*



# Extracting Insight

## International Communities Share Knowledge and Experience

By Paige Campbell



groups detailed ecological features. Sumitomo outlined the specific areas they hope to mine. Tribal and community leaders described their use of the land, including fisheries, sacred sites and fresh water sources. And Kreps brought the lessons of the Clinch Valley — such as strategies to protect water sources by reducing acid mine drainage — to help guide the conversation.

Half a million people live on the hundreds of specks in the wide-open Pacific that form the Solomon Islands. Most live simply, subsisting as small-plot farmers and fishermen. Land is owned collectively by villages and tribes. The economy is tiny, the natural resources vast.

Eight thousand miles away in the mountains of southwest Virginia, Brad Kreps directs the Clinch Valley program of The Nature Conservancy, an international conservation group. Here, the conservancy's work involves restoring abandoned mine lands harmed by decades of unregulated coal mining. The damage is significant; many sites will require long-term, extensive cleanup.

There's no such legacy to heal from in the Solomon Islands, which have seen almost no mining. But a Japanese company, Sumitomo, is poised to change that. They've explored the mineral resources on Isabel, the Solomons' third-largest island, and found nickel. Now, they want to dig. Locals, including the staff of The Nature Conservancy's Solomon Islands program, see a critical need to move forward mindfully. The central government agrees. Previous efforts to develop the economy through commercial logging have been a sobering lesson, with forests heavily cut and little revenue reaching the people. Nobody wants to make the same mistake with nickel.

But the conservancy staff in the Solomons has little experience with mining. They're marine experts, working for decades now to protect some of the planet's most diverse and threatened coral reefs. So they sought help through a global fellowship that sends U.S.-based Nature Conservancy staff to provide short-term support abroad.

That fellowship tapped Kreps and his colleague, Braven Beaty, to leave Appalachia and spend a month last winter with the Solomon Islands team, culminating in a three-day Community Conservation Workshop on Isabel Island. There, Kreps says, "we worked to map out the at-risk natural and cultural resources on the island." The Nature Conservancy's Solomon team and other environmental

That conversation has been fruitful. Local Nature Conservancy staff have become more knowledgeable about mining, and Sumitomo has agreed to deem certain locations off-limits. Most critically, insight from the workshop is now helping the government determine how, exactly, to manage mining if it proceeds. "It's kind of a watershed moment," Kreps says: an opportunity to draft industry-specific laws in advance of the industry. In other words, it won't be another Appalachia. "You won't have 70-plus years of unregulated mining before passing laws."

The Nature Conservancy plays a supportive role, not a prescriptive one. "We're not going to tell them what to do," Kreps says. "We just want to help them have all the information available to make informed decisions." That foreknowledge, he says, could make all the difference for a developing nation eager to avoid the pitfalls of unregulated mining.

### Economic Systems at Work

More than just geographic distance separates this Pacific island from the eastern United States. Other factors, such as mineral ownership policies, differ as well. In Appalachia, private citizens hold the rights to minerals beneath their land.

But in the Solomon Islands, the government owns all the nickel, no matter who owns the land. In this way, the economics resemble those in the South American nation of Colombia, where minerals are also government-owned but privately extracted.

Policymaking in Colombia, though, hasn't been quite so painstaking or attentive to locals, say members of Witness



Solomon Islanders and biologists from The Nature Conservancy map natural and cultural areas at risk from nickel mining. Photo by Brad Kreps, courtesy of The Nature Conservancy

for Peace and Kentuckians for the Commonwealth. The two non-profits have forged an ongoing knowledge-sharing partnership between coal-mining regions of Kentucky and Colombia, and annual delegations have allowed residents of each region to visit one another.

As part of a 2009 delegation to Colombia, Kentucky native Miranda Brown saw villages so disturbed by reckless mining practices that residents were ready to simply abandon their homes. Mines had damaged farmland and water sources, bringing nothing but hardship. Companies claimed to provide jobs but hired no locals.

Strategically speaking, that might be an asset, Brown says. "Everyone's in the same boat as they fight for compensation to resettle. No one has a personal investment in the company."

Back in Appalachia, solidarity can be disrupted by financial ties. "Somebody in your family, or your neighbor, is employed [by the mining company], so it's hard to be united in fighting," she says.

Appalachian studies pioneer Helen Matthews Lewis vividly remembers one particular fight between Virginia coal miners and their employers. Hosting a community forum about the coal industry in the 1960s, Lewis was stunned when nearly 500 disabled miners arrived, carrying their chest x-rays in their back pockets. The miners had black

lung disease, and came to spread the word as they demanded compensation.

A few years later, Lewis traveled to Wales to study life in mining communities there. She and her colleagues found black lung to be scarce and conditions to be safer overall. Lewis attributes the difference to economics; in the 1970s, the British government didn't just own Welsh coal, it owned the entire industry, and invested early on in safety equipment such as sprayers to keep dust out of the air — and out of miners' lungs. When Welsh miners traveled to Appalachia during a later phase of Lewis's research, "they were horrified at conditions here," she says.

Again, says Lewis, the problem is a large-scale economic one.

"When a company essentially owns the community, they can get away with tearing it up," she says.

Preserving and sustainably using land in the face of ambitious industry is a global struggle, perhaps an inevitable one in regions striving to compete economically. Brad Kreps sees that reality in the Solomon Islands. The Nature Conservancy is aware that while residents of the islands value their traditional lifestyles, they also hope to modernize their economy in order to improve health care and increase access to electricity, gas-powered boats and better roads.

"But we also recognize that while

*Continued on next page*

# Kindred in Song

## How Bluegrass Brought the World Together



By Brian Sewell

"Greetings from North Carolina." Doc Watson's rich, syrupy baritone voice is instantly recognizable in a 1976 recording from Tokyo, Japan, where he took the stage with his son, Merle. "We've come to try to spread a little goodwill from our people to your people."

After an extended, solo-filled showcase of "Roll in My Sweet Baby's Arms" transports the audience to the hills of the North Carolina High Country, Doc and Merle's Japanese crowd erupts in applause. They cheer and holler like any other group of bluegrass fans, grateful for the chance to hear music that, despite being from another culture, they identify with all the same. By the time Doc and Merle play "Black Mountain Rag," the crowd is stomping their feet and clapping to the beat. With each song, it becomes clearer that this performance could have been anywhere.

Doc Watson, who passed away in the spring, was a cross-cultural communicator, an ambassador of Appalachia and traditional American music. Countless aspiring flatpickers and folk players have viewed him as a teacher, regardless of their home country or native language. Little more than a decade after his first solo appearance at Gerde's Folk Club in

New York City, appreciation for Doc's graceful guitar playing and his humble approach to sharing the music he loved had spread around the world.

The interwoven and networked ways the world now shares music, art and culture is sometimes criticized as homogenizing heritage. But as the popularity of traditional American music spreads across cultures, borders are transcended, stereotypes are fractured and lives are transformed as musicians and fans find new ways to relate to each other. And it goes both ways; just as Appalachia's musical influence has grown abroad, greater access to traditional music of other cultures is changing music being created in Appalachia from the inside out. Perhaps most importantly, what one sees as a threat to culture or regional identity, another sees as an opportunity for rediscovery and revival.

"In this modern world, there are ambassadors who are stronger than the political ambassadors," Italian guitarist Beppe Gambetta, who has been called a "virtual United Nations of influences" for his fusion of flamenco, flatpicking and classical styles, told *Acoustic Guitar* magazine in 2003. "Doc was such a strong ambassador that I became morally American, culturally American, and I started to respect and be involved in the culture of this country because of him."

Like Gambetta, Swiss-born brothers Uwe and Jens Kruger



In addition to being an exceptional musician, Doc Watson was a cultural ambassador. Swiss brothers Uwe (left) and Jens (far right) learned to love traditional Appalachian music from listening to his recordings. After moving to Wilkesboro, N.C., in 2003, the Kruger Brothers could often be found playing with Doc at local venues. Photo courtesy of The Kruger Brothers

grew so close to Appalachian music while listening to country radio that they began to play the guitar and banjo emulating the musicians they loved the most — Doc Watson, Bill Monroe, Lester Flatt and Earl Scruggs, among others.

When Jens Kruger met Bill Monroe on a trip to the United States in the 80s, they played together in Nashville, Tenn., where Monroe introduced Kruger as the "first European instrumentalist to perform at the Grand Ole Opry." Monroe asked him what he wanted to do in life, to which Kruger said that he "wanted to play bluegrass music."

"You can't," Monroe replied. "You're not from Kentucky. Go home, write your own music, and then come back."

Before returning to join the American folk circuit, the Kruger Brothers played around Europe, adopting and incorporating new sounds, building on their folk foundation. Their style evolved into a fluid sound steeped in European and Appalachian traditions that they've since dubbed "new Carolina music." By expanding on the three-finger method perfected by Earl Scruggs, Jens Kruger has been called "one of the world's most musically sophisticated and technically accomplished five-string banjo players."

In 2003, they adopted America as a home, specifically Wilkesboro, N.C., the site of the international bluegrass gather-

ing Merlefest. The annual event began in 1988 as a tribute to Merle Watson, who died in an accident three years before the festival was founded. Now when they take the stage, the Kruger Brothers might play a Bill Monroe tune between their own compositions, but Jens can just as easily fingerpick a Bach cello suite.

As a genre that developed largely before it was ever recorded, traditional Appalachian music might still conjure thoughts of front porch jams where a foot tapping on wooden floorboards kept the beat. In the 20th century, studio recordings, then the Grand Ole Opry, the Newport Folk Festival and any number of small festivals around the United States brought folk, country and roots music to a much wider audience. The "high lonesome sound" of bluegrass, as Monroe described it, appealed to listeners worldwide. Decades later, YouTube and the digital revolution continue to dramatically change the ways music is created and shared.

Due to increased access to genres of music from every culture, modern folk artists draw from a web of influences with little respect to borders or boundaries. Even Doc had a cultural mosaic of musical influences and was fascinated by European virtuoso Django Reinhardt's gypsy-jazz before he even

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# Extracting Insight

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a mining sector could bring economic growth and some of those opportuni-

ties, it could also happen in a way that doesn't benefit local people very much, and possibly cause enormous social and environmental problems," Kreps adds. "We want to help people consider the

importance of environmental protection, of course. But our biggest focus is to bring our experience to support a good decision-making process."

Kreps will be watching an industri-

alizing Isabel from Virginia, hoping that process will help pave the way toward a mindful, sustainable future.

# A Double-Edged Sword

## Outsourcing Appalachia's Furniture Industry

By Jesse Wood

The expansion of global markets and its effect on Appalachia has been a lopsided, double-edged sword, particularly for the furniture and lumber industries.

While exposure to foreign markets has checked inflation and opened the door to an array of new customers, it has crippled the Appalachian furniture manufacturing workforce because of cheaper labor overseas.

In North Carolina, which is home to High Point, the "Furniture Capital of the World," employment for the industry peaked in 1990 with nearly 100,000 laborers. According to North Carolina State University's Furniture Manufacturing and Management Center, state-wide employment has declined every year since 1999, and as of 2012, the industry employed less than 38,000 workers.

"What we have seen is a real tsunami hitting us," says Urs Buehlmann, an associate professor at Virginia Tech. "I am pretty sure there are towns that lost 70 to 80 percent of the jobs they had. It has been disastrous for certain parts of Appalachia."

Although the worldwide recession has contributed to job losses in recent years, Buehlmann said furniture ghost towns in Henry County, Va., such as Bassett, Stanleytown and the city of Martinsville, which has had one of the country's highest unemployment rates for years, illustrate "the destructive powers of globalization."

Since 2000, seven large furniture-manufacturing plants in Henry County closed, eliminating nearly 1,800 jobs, according to *Furniture Today*, a quarterly industry publication. During that same time span, more than 40 furniture plants, employing nearly 8,000 workers, closed in the state.

Stanley Furniture was among the most recent closings in Henry County. At the end of 2010, the plant's 530 employees were laid off as management moved production to Southeast Asia.

"If you are managing Stanley Furniture, you probably have no problem with globalization. You may have to travel more nowadays, but you still have your job," Buehlmann says. "But on the other hand, if you're the mill hand at Stanley — well, you just lost your job."

In the fall of 1993, the U.S. Congress ratified the North American Free Trade Agreement, the world's largest and perhaps most controversial agreement of its kind. The trade deal reduced barriers to U.S. exports, making it easier and cheaper to ship out products and services while protecting U.S. interests abroad.

The results were devastating for the nation's manufacturing workforce, as the free trade agreement offered financial incentives for companies to outsource factories to Mexico. Layoffs in Appalachia were out of proportion to the rest of the country.

According to a Commission on Religion in Appalachia report, "Studies of NAFTA-related job losses [show] that 766,030 actual and potential jobs were lost between 1993 and 2000, and of these losses, 279,141 — or 36 percent — occurred in Appalachian states."

Unfinished parts await assembly at The Hickory Chair Furniture Co. in Hickory, N.C. Photo by Cassandra LaVelle of coco+kelley, cockkelley.com



Above: A sign in Buckhannon, W.Va., advertises two lumber-dependent industries — furniture and undertaking. Photo by Bill Herndon Left: Appalachia USA delegates attended the 2012 Furniture Manufacturing and Supply China trade fair in Shanghai in September. Photo courtesy of the Appalachian Regional Council



But NAFTA didn't have that severe of an impact on the furniture industry, Buehlmann says, because those jobs didn't move to Canada and Mexico. He added that the 157-country World Trade Organization "had a much more profound impact on the furniture industry" as companies sought low-wage workers in China, Vietnam and other countries in Southeast Asia.

Scott Hercik, Export Trade Advisory Council coordinator for the Appalachian Regional Commission, an economic development agency, says

### Sustainable Success

Caperton FurnitureWorks is located in Berkeley Springs, W.Va., and has been for nearly 40 years. While most furniture factories have gone out of business or moved overseas, Caperton is producing high-quality pieces using local wood and local skills for national companies. Demand for American-made furniture is growing, says owner Gat Caperton, and they're meeting that demand in Central Appalachia.

A proud West Virginian, Caperton sources nearly all of his wood locally, using a lumber mill in nearby Elkins. And the pieces his factory produces aren't built by machines on an assembly line — each one is put together by hand.

Excerpt from a blog post by Carrie Ray, read more at [AppalachianTransition.org](http://AppalachianTransition.org).

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# World Market

## Sowing Seeds of Local Resilience

By Molly Moore

Appalachian farms are many things: bucolic, rugged, diverse and productive. But rarely does the word "large" apply.

Historically, farm size was not always an indicator of farm success. But today, small farmers aren't just competing with their neighbors; they're competing with large multinational conglomerates for space on consumers' grocery lists.

Allison Perrett, a researcher with Appalachian Sustainable Agriculture Project, a nonprofit organization working in western North Carolina, studies the impact of the world marketplace on regional agriculture. "Globalization is both this big behemoth economic global system, but it's also the countermovements that are emerging in response to it," she says.

The ethos of globalization — eliminating barriers to international trade and rewarding regions for maximizing productivity — entered U.S. agricultural policy in the 1950s, Perrett says, when then-President Dwight Eisenhower's secretary of agriculture, Ezra Taft Benson,



Sheep at Maple Creek Farm in Burnsville, NC, enjoy a sunny day after a snow. Since the 1950s, the region around Burnsville has lost about 70 percent of its farmland. Photo courtesy of ASAP, [asapconnections.org](http://asapconnections.org)

told farmers to "Get big or get out."

"We're in the mountains and our farms are constrained by geography," Perrett says. "And so our farms can't get big, for the most part they can't achieve the volume, the economies of scale that you need to have in order to compete in a global market." According to the most recent U.S. Census Bureau farm data, from 2007, the average U.S. farm is about 420 acres, while the average western North Carolina farm is 75 acres.

### Turmoil Breeds Transition

Still, Appalachian farms were comparatively sheltered from the changes that led to the consolidation and closure of many medium- and small-scale mid-western farms during the '80s and '90s. Appalachia lost farms but retained more small growers than the rest of the nation largely because of a federal program that provided stable prices for one of the region's signature cash crops — tobacco.

The program, a product of the New Deal that followed the Great Depression, controlled the tobacco market by guaranteeing a fixed price to growers who adhered to production quotas. But mounting public health concerns with tobacco use paved the way for the program's demise

### Double-Edged Sword

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at global trade shows.

Although the unemployed furniture workers in Henry County wouldn't notice, Mike Padjen, vice president of international sales for North Carolina-based Klausner Furniture, says the U.S. furniture industry is actually experiencing a renaissance.

For the past two years, the demand for U.S. furniture has increased as the emerging middle class in countries like Brazil, Russia, India and China are

earning more money and demanding customized, higher-quality furniture.

"I see it continuing to open up. I mean, the world is going to drive this a lot," Padjen says, adding that as the cost of living increases in places like China, the cost of manufacturing will rise, too, and "the efficiency of making product in the U.S. increases."

Padjen, like Inman and Hercik, agrees that the expansion of global markets has both merits and flaws. All three cite the loss of jobs and closed factories, which Padjen attributes partly to the Great Recession, as the "bad part," but Padjen



Appalachian farmers grow countless varieties of squash. Photo courtesy of ASAP, [asapconnections.org](http://asapconnections.org)

in 2004, known as the tobacco buyout. In 1997 there were over 3,000 tobacco farms in western North Carolina alone — ten years later, there were about 250.

Members of the farming community witnessing the industry's turmoil saw the tobacco buyout approaching. In response, Perrett says, "a group of farmers, concerned citizens, and agricultural support personnel came together and said, 'What can we do to make sure that farming survives and stays in our communities and continues to be part of our culture?'" She sees the rise of the local food movement over the past decade as a combination of farmers' need to transition in order to survive in the new market and consumers' growing awareness of healthy, sustainable food.

One measure of the success of local foods is the Appalachian Sustainable Agriculture Project's local food guide,

which has been published in western North Carolina since 2002. In a decade, the number of farms grew from 36 to over 550, and farmers' markets increased from 28 to 91, encouraging young entrepreneurs to start farming and providing seasoned farmers with new sources of revenue to replace those outlets lost to market shifts.

### Costly Compliance

In Abingdon, Va., Kathryn Terry heads Appalachian Sustainable Development, an organization that supports local food systems in the mountains of Virginia and Tennessee. She says the influence of multinational food systems can surface in unexpected places, such as when regional farmers are working to bring local food into local grocery stores. Many grocery chains require farmers to follow uniform international

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also notes the lumber industry's ability to revive itself through foreign markets and major Asian companies employing workers in North Carolina's hard-hit furniture industry as the good parts.

Two examples Padjen mentions include Hong Kong-based Samson, one of the largest furniture companies in the world, buying upholstered-furniture maker Craftmasters and employing Americans in Taylorsville, N.C., and China-based Schnadig's recent partnership with Key City Furniture to manufacture upper-end upholstery furniture in Wilkesboro, N.C. Even in

Martinsville, six furniture companies are still operating, employing a fraction of the former workforce.

But Virginia Tech's Dr. Buehlmann, who is a strong believer in free markets, says he doesn't see it in "black and white," and when he visits places like Henry County, he has doubts about the "fairness" of globalization.

"Unfortunately, we don't seem to be able to even out the score," Buehlmann says.

For those unemployed millhands in Bassett, Stanleytown and Martinsville, he says, "Scars still exist that won't go away."

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picked up a guitar. Today, young acts from the region are finding their voice and acclaim in a more multicultural, genre-bending approach.

Sisters Chloe and Leah Smith record and tour as the aptly-named Rising Appalachia. Their sound is firmly rooted in the folk revival of their generation while compelling the listener to explore a world of far-away rhythms and exotic hymns. They busk with acoustic instruments on street corners just as Doc Wat-

son once did; they play the fiddle and banjo, and sing in rich harmonies. But their accompanying acrobats and crowd-wide chanting add a modern edge for fans of old-fashioned folk music.

In the weeks after Doc Watson's passing, the global folk community expressed their gratitude online, sharing memories by commenting on obituaries and message boards. On docsguitar.com, a site dedicated to his music and the instruments he used to create it, Doc is memorialized by fans from France, Belgium, Canada, the United Kingdom, Australia, Japan, Germany and many other nations.

## World Market Sows Seeds of Resilience

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food safety procedures, which Terry says are well-intentioned but can be damaging to small producers.

"These food safety requirements are really not tailored for our farmers," she says. According to Terry, it's not uncommon for a food safety procedure

to require tissue samples from each planting, which can cost \$200 or more per crop, with some crops planted more than once in a growing season. For a small farm with many different crops and multiple plantings, that price tag can be high enough to keep a grower off the grocery shelves. On top of that, she says, different grocery stores often require various costly safety certifications.

Farmers without the proper certifications can be turned down from gro-

A few months later, a crowd gathered on the lawn of the Jones House Community Center in Boone, N.C., to celebrate the inaugural "Doc Watson Day." Two of Doc's biggest fans and followers, the Kruger Brothers, told stories, shared memories and played a few of their favorite songs. As his brother tuned his guitar, Jens described the first time they heard a recording of Doc playing the furiously fast fiddle tune, "Black Mountain Rag."

"Uwe just looked at me like 'this is not possible,'" Jens said. "I still look at him like that," Uwe admitted to the crowd.

"When we pick this tune," Uwe

continued, "it reminds us of the countless hours spent in front of the record player, turning it down to 16 RPM and trying to figure out what was on there. I still have no clue," Uwe said as he led into the song.

Uwe sped up on the guitar and by the time Jens launched into the first solo, babies were bouncing on their parents' knees, and the crowd had begun cheering and clapping to the beat. The stage where the brothers played was just a few miles from Doc's birthplace and only a short walk to the downtown street corner where a bronze statue of Doc sits, but it could have been anywhere.

cers, which Terry says is frustrating, especially when certified producers from countries with poor water sanitation are allowed to sell their goods. Appalachian Sustainable Development works to raise grocers' awareness of local farmers' needs, with some success. "Some of our buyers have been flexible to accept other certifications, which is stepping out on a limb for them," she says.

### Synchronized Swimming

Adding to regional farmers' troubles is the simple fact that large companies can sell their product for less and still make a profit, which threatens small farmers. Still, lower-cost imports aren't always harmful, says the University of Arizona's Dr. Kevin Fitzsimmons, secretary-treasurer of the American Tilapia Association. Tilapia, a white fish native to Africa but frequently farmed in Asia and South America, also fares well in indoor aquaculture facilities.

In 2010, the U.S. imported over 11 times more tilapia than American farmers sold domestically. Fitzsimmons says most U.S. imports are frozen filets, which reach different markets than fresh, American-grown fish. "U.S. growers sell the vast majority of their fish as live product to Asian restaurants and grocery stores," he says. Because tilapia require water temperatures above 60 degrees, it's unlikely that U.S. farmers could raise tilapia for the frozen market as cost-effectively as equatorial producers. "Really all the [frozen] products coming in from China have not affected U.S. growers at all except to educate the public about what tilapia is."

Directly or indirectly, that market

education has an impact in Appalachia. Blue Ridge Aquaculture in Martinsville, Va., the biggest American producer of indoor-raised tilapia, transports live fish across the U.S. and Canada. The aquaculture facility at Johnson County High School in Mountain City, Tenn., produces the minimum amount of fish needed to keep the facility running for its main purpose — education. There's a waiting list of local consumers who purchase the 10,000 pounds of tilapia the system currently yields annually (the hydroponic facility also yields bib lettuce, tomatoes and cucumbers).

The high school's geothermal-powered, highly efficient aquaculture facility is arguably a model of self-sufficiency and the integration of a non-native food product into a local market. Kenneth McQueen, who helps manage the high school facility, says the biggest challenge facing domestic tilapia producers isn't international competition but something that strikes closer to home — increasing local demand for fish by encouraging Americans to eat healthier.

Ironically, Appalachia's exposure to international trade winds might be seeding a period of resilience among Appalachian farmers. "The local food campaign's been around for a decade, but we really are at the very beginning of this transition," Allison Perrett says. "It took a long time for the global food system to get to where it is, and those systems are very entrenched. And it's going to take time to develop food systems that are grounded in our communities."

# Appalachia's Political Landscape

## The Battle is Over — Has the "War" Just Begun?

By Brian Sewell

Less than a month after the Nov. 6 elections, Republican Rep. Shelley Moore Capito of West Virginia announced that in 2014 she would seek the U.S. Senate seat currently held by Democratic Senator Jay Rockefeller. Although Rockefeller has not yet announced if he will seek another term, the effect of a divisive election in which the Appalachian coal industry played a key role might have already given Capito an edge.

For decades, Rockefeller has been an advocate for coal miners and mining. In the months leading up to the election, however, he commented on the harsh truths that the coal industry must face, including declining demand and negative health impacts, and criticized what he called "scare tactics" about a political "war on coal" as a "cynical waste of time, money and worst of all, coal miners' hopes."

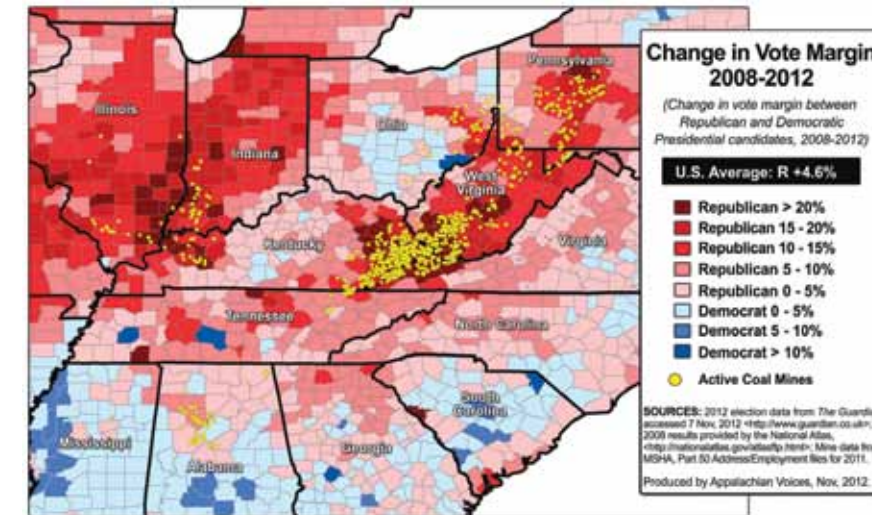
As a result, the coal industry and its allies — including Capito, who recently said that she plans to continue fighting the U.S. Environmental Protection Agency's "dangerous and unconstitutional crusade to dictate our nation's energy policy" — have implicated Rockefeller in the political battle over coal that his remarks aimed to rectify.

Coal has always played a role in deciding who gets elected in Appalachia. This time around, it seemed, politicians either chose a side or one was chosen for them.

### Campaigning for Coal

Appalachia is a bastion of swing states. Kentucky, Ohio, Pennsylvania, North Carolina, Tennessee, Virginia and West Virginia have 89 electoral votes that can be won or lost. Each of these states has changed hands at least once in presidential elections since 1996, with the exception of Pennsylvania, which has remained narrowly Democratic.

Swing state voters' concerns and attitudes receive the attention of candidates and their campaigners, and a handful of states — many of which produce coal — can decide who becomes



Between the 2008 and 2012 presidential elections, the Republican party gained in 95 percent of coal counties in the United States. Maps of the partisan shift reveal the price the administration paid for EPA actions that were strategically portrayed as a political "war on coal." Map produced by Appalachian Voices

president. But outside spending groups and political action committees also target decisive states, and they spend big on the political advertising and media coverage that affects public understanding of issues.

Although largely driven by market forces, the coal industry's downturn has been strategically portrayed as the result of actions by the Obama administration and the EPA. And although the "war on coal" rhetoric was not enough to make Barack Obama a one-term president, the message of regulations suppressing economic opportunity resonated with voters in areas facing layoffs and high unemployment.

One example of where the strategy is paying dividends is Boone County, W.Va., which produces more coal than any other county east of the Mississippi River. Of the 3,410 counties in the United States, Boone saw the largest pro-Republican swing, approximately 42 percent, between the 2008 and 2012 presidential elections. The same pattern was seen in southwestern Virginia, where the already GOP-leaning vote margin in the six coal-mining counties swung further in favor of Republicans by 24 percent.

The "war on coal" message was also used to target incumbents running in coal-producing congressional districts. In Kentucky's 6th district, Democratic Rep. Ben Chandler lost to challenger Andy Barr

after a heated campaign in which Barr succeeded in linking Chandler to the Obama administration. Coal-friendly donors and political action committees backed Barr; nearly \$4 million was spent on television ads in Lexington, Ky., most questioning the other candidate's allegiance to coal.

In states including Pennsylvania and Ohio, industry-endorsed candidates were defeated in several key U.S. Senate races. In a highly contested race in Virginia between Democrat Tim Kaine and Republican George Allen, more than 60 percent of the \$53 million spent by outside groups benefited Allen. Ultimately, Kaine defeated Allen by a margin of 20,000 votes, helping the Democrats retain a slim majority in the Senate.

### On Different Terms

Although the United Mine Workers of America did not endorse either presidential candidate, outspoken coal executives and union members made it clear that they were very concerned with the results of the election. Less clear, however, was a substantiated explanation of why their fears were contingent upon its outcome.

According to analysts, new regulations are not to blame for coal's downturn. Instead, the coal industry is suffering due to competition from cheap natural gas and declining demand paired with rising production costs. Operators in



Appalachia are especially at risk in this new market reality. Though, as Associated Press reporter Vicki Smith wrote, "it's easier to call the actual forces reshaping coal a political or cultural 'war' than to acknowledge the world is changing, and leaving some people behind."

In the weeks after his re-election, the coal industry portrayed the anti-Obama voting trends in coal-mining states as a backlash against the economic impact of EPA rules on miners and their families. In most areas, however, mining jobs have not declined, even though demand for coal has dropped precipitously. Under the Obama administration, coal mining employment in West Virginia increased, and remains higher than most of the past decade, despite layoffs in 2012.

As for the much-vilified EPA, the agency has so far been lenient on the implementation of regulations that could impact coal-burning utilities by extending compliance deadlines and often choosing to delay or even jettison proposed rules altogether.

Fundamental changes in the United States' energy landscape and challenges endemic to the Appalachian coal industry have contributed to a shift in the politics of the region. Regardless of market and regulatory uncertainty, if Appalachian leaders want results, it will take more than criticizing the EPA to improve the region's economic outlook.

Part of that will mean going beyond the "war on coal" rhetoric and accepting the realities of coal's changing role in America. Or as former West Virginia Senator Robert Byrd said in one of his last public statements before his death in 2010, "To be part of any solution, one must first acknowledge a problem."

The politics of Appalachia are closely tied to coal mining and its impacts on the land and the people. In upcoming issues of *The Appalachian Voice*, we will continue to explore the connections between Appalachian politics, energy policy and the environment.

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## The Export Enigma: Appalachian Coal's Complicated Outlets Overseas

By Brian Sewell

Recently, coal exports have provided operators in Appalachia with a crucial buffer against the market-driven forces that are shaping the energy landscape across the United States.

According to the U.S. Energy Information Administration, between 2009 and 2011, coal exports nearly doubled in response to stagnant domestic consumption. This year, the EIA forecasts that exports will reach a historic high of 125 million tons.

The trend has led some to believe that the coal industry will be able to offset domestic competition from natural gas and even the strictest regulatory scenarios by feeding overseas demand.

But recent events including China's inflation-inducing economic trends and the opposition to new export terminals in the U.S. Pacific Northwest are reminders of the myriad factors that influence the world's ever-changing appetite for coal and the nations who will be best able to fulfill it.

### Metallurgical Markets

Although the world's quest for growth has contributed to the precipitous rise in exports, changes at home have hastened the trend. Abundant natural gas and the announced retirements of hundreds of coal plants nationwide, among other factors, are pressuring U.S. coal operators to rethink the way they do business by refining strategies to suit overseas markets.

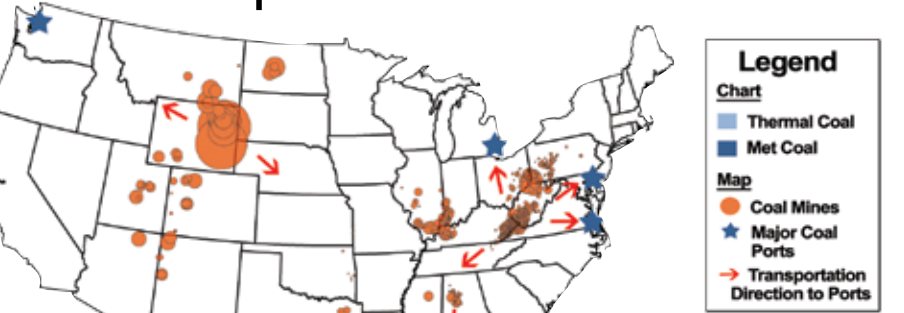
For major coal companies operating in Appalachia, that has meant focusing on metallurgical coal used in steelmaking, which is sold at a higher price than thermal coal and has seen foreign demand grow in the past decade.

Nearly all of the 70 million tons of metallurgical coal exported from the United States in 2011 was mined in Appalachia and shipped from Eastern ports. The increased focus on metallurgical coal exports was put in the spotlight after Alpha Natural Resources, Peabody Energy, and Arch Coal all bet big on overseas demand through a series of acquisitions.

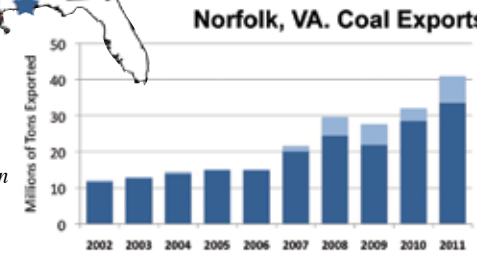
Two months before Alpha Natural Resources acquired Massey Energy in January 2011 to become the leading producer of metallurgical coal in the United States, JPMorgan Chase & Co. forecast prices for the high-quality coal — which hit a record \$330 per metric ton in early 2011 — to increase by 50 percent in 2012. Instead, the price has plunged.

In the second quarter of 2012, the economy of China, the world's largest consumer of coal and its largest steel producer, showed signs of waning. After helping drive up prices for close to a decade, China's demand for metallurgical coal quickly faltered and prices fell by 50 percent. Additionally, as growth in other sectors slows, Asia is left with a supply glut in steel, further driving down demand.

As the largest producer in Appalachia, Alpha Natural Resources, caters as



The Norfolk, Va., port exported approximately 40 percent of coal that left the U.S. in 2011, the majority of which was metallurgical coal. Exports of thermal coal from Appalachian mines have increased slightly in the past few years, but changes in port capacity in the Pacific Northwest could create a nearly endless supply of cheap Powder River Basin coal to Asian markets. Map produced by Appalachian Voices



Western counterpart.

much as 70 percent of its metallurgical coal production to export markets. In September, as an already severe industry downturn was beginning to face emerging challenges in metallurgical coal markets, Alpha announced it would restructure to meet "the evolving demands of a changing global coal market."

Understanding their interdependency with Appalachian coal and a strong export market, at the end of November both CSX and Norfolk Southern railroads announced they would cut rail tariffs by approximately 15 percent to help exports of metallurgical coal remain competitive.

### Coal Still Calls

A handful of developed nations are working to decrease their dependence on coal, but it remains a critical component in the world's energy generation and a driver of the global economy. A recent report by the World Resources Institute revealed that around 1,200 new coal-fired power plants are being considered around the world, two-thirds of which would operate in China and India.

While metallurgical coal prices are expected to stay stagnant next year, the price of thermal coal is expected to increase along with global demand.

With easy access to ports, Appalachian coal operators are taking advantage of the growing need for cheap energy sources overseas. But the region also faces a threat to thermal coal exports from its

Thick coal seams and large-scale operations in Wyoming's Powder River Basin produce some of the cheapest coal in the world. But the lower energy content of the coal, long distances to transport by rail and limited export capacity from ports in the Pacific Northwest limit its use in the United States and abroad.

That could change, however, as plans to expand and build new export terminals have surfaced in Washington and Oregon that could ship as much as 110 million tons of coal to Asia each year.

Public interest groups, 57 native tribes and the Seattle City Council have been vocal in their disapproval. In response to the growing opposition, Peabody Energy, Arch Coal and other industry groups formed the Alliance for Northwest Jobs & Exports, and began airing ads touting the potential economic benefits of expanding coal exports.

While the Appalachian coal industry will benefit as a global leader in metallurgical coal exports for the foreseeable future, increased access to Powder River Basin coal could significantly change the region's role in thermal export markets.

Even as coal exports receive the attention of industry experts and analysts, they remain exceedingly complex. So much so that a Lummi tribal leader symbolically burning a mock check from the mining industry on the beach in Bellingham, Wash., instead of signing a real one, could affect the outlook for Appalachian exports far into the future.

## Under Pressure, Patriot Coal to Phase Out Mountaintop Removal

By Brian Sewell

On Nov. 15, amid bankruptcy litigation and multiple lawsuits, Patriot Coal announced it would begin phasing out mountaintop removal coal mining in Appalachia as part of a settlement over selenium pollution. One of the largest operators in the region, the St. Louis-based spin-off of Peabody Energy is the first major coal operator to announce it will stop using mountaintop removal.

According to the agreement made with the Sierra Club, the Ohio Valley Environmental Coalition and the West Virginia Highlands Conservancy, Patriot will gradually reduce production from surface mines over the next several years and immediately rescind pending permits for new surface mines.

In his statement to U.S. District Judge Robert Chambers, Patriot CEO Ben Hatfield said that Patriot recognizes that its mining operations "impact the communities in which we operate in significant ways," adding that ending mountaintop removal will reduce the company's environmental footprint.

Hatfield's statement, however, focused largely on the financial benefits of reducing the company's risks as it works through bankruptcy. He added that the settlement is consistent with Patriot's plan to "focus capital on expanding higher margin metallurgical coal production and limiting thermal coal investments to selective opportunities where geologic and regulatory risks are minimized."

As the industry faces declining domestic use and competition from natu-

ral gas, coal operators in Appalachia are turning to metallurgical coal and focusing on meeting the growing demand overseas. By reducing the regulatory and market risks of continuing to operate mountaintop removal mines, Patriot believes it will increase the likelihood of emerging from bankruptcy as a viable business, able to satisfy its obligations to its nearly 4,000 employees.

Unsurprisingly, representatives of environmental groups and the coal industry saw the news differently. Executive director of the Sierra Club Michael Brune said that "Patriot Coal may be the first company to cease mountaintop removal mining but, because of the tireless efforts of committed volunteers and community organizations, it certainly won't be the last." On the other hand,

West Virginia Coal Association President Bill Raney remarked that "It's one company trying to restructure itself. This doesn't change anything. I don't think you can apply this universally across the industry or across the state."

As part of the agreement, Patriot is able to delay \$27 million in selenium pollution compliance costs until 2014, improving the company's ability to pay an estimated \$400 million in long-term selenium cleanup costs.

Patriot Coal filed for bankruptcy in July after reporting considerable losses since 2010. On Nov. 27, a federal judge granted a request by Patriot employees to move the bankruptcy litigation from New York City to St. Louis, where Patriot and parent companies Peabody Energy and Arch Coal are based.

## The Lowdown on Coal Ash

By Matt Grimley

On Nov. 19, a federal judge ordered mediation between the Tennessee Valley Authority and the 872 Roane County, Tenn., residents suing over the December 2008 coal ash spill that released more than a billion gallons of the waste into the Emory and Clinch rivers.

U.S. District Judge Tom Varlan already found TVA liable in the failure of the coal ash dam, writing that the spill could have been prevented. The federal utility has estimated that the cleanup project, which is expected to continue through 2015, will cost about \$1.2 billion.

Recently, testifying on proposed Senate Bill 3512, which would regulate how coal ash is stored, mine safety and

environmental specialist Jack Spadaro said he is certain that the bill in its present form "will result in a catastrophic failure of a coal ash dam containment structure that will result in extensive loss of life and severe environmental damage that will be irreversible."

The U.S. Environmental Protection Agency is still considering a rule to regulate coal ash either as hazardous waste or as solid waste. Despite pressures from environmental and other advocacy groups, the EPA has indicated that the rule is unlikely to be decided until 2014.

According to the EPA, coal-fired power plants create 136 million tons of coal ash every year.

### Report Makes the Case for Coal Plant Retirements

Nearly 300 of the oldest coal-fired power plants in the United States have been scheduled for closure. A new report by the Union of Concerned Scientists identified up to 353 additional plants that are uneconomical to continue operating. In "Ripe for Retirement: The Case for Closing America's Costliest Coal Plants," the cost of operating individual coal-fired units is compared to alternative forms of electricity generation, including natural gas and wind generation. According to the report, Southern Co., Tennessee Valley Authority and Duke Energy are operating the most uncompetitive coal plants. Read the report at [www.ucsusa.org](http://www.ucsusa.org)

### Kentucky Cabinet Settles in Wrongful Termination Suit

A former Kentucky state official dropped the wrongful termination lawsuit he filed against Gov. Steve Beshear in 2009 after settling with the Kentucky Energy and Environment Cabinet. Ron Mills was the head of the cabinet's Division of Mine Permits before being terminated in November 2009 after refusing to sign permits for what he called "illegal practices." Mills claimed that, despite his objections, the Beshear administration skipped legal documentation procedures and issued permits to coal companies that were unable to demonstrate rights to the entire parcels they planned to mine. The settlement provides Mills \$270,000 in exchange for dropping the lawsuit.

## Coal Industry Employment Remains in Flux

On Nov. 27, Southern Coal announced it would recall 650 laid-off miners after entering into a multi-year contract with American Electric Power. The deal will allow Southern Coal to reopen mines that were closed earlier this year and will prevent the layoffs of another 500 workers.

Much of the complaints about a political "war on coal" during the recent election cycle were predicated on using layoff figures from Appalachian coal mines, however, the industry has kept mostly quiet about new sites and

expansions.

According to the *West Virginia State Journal*, mining employment in the state remains far higher than most of the past decade. During the third quarter of 2012, coal employment dropped 5 percent nationwide, but remained higher than at the start of the recession. During the first three years of President Obama's first term, the number of miners working in Appalachia rose due to increased scrutiny of mountaintop removal permits by the U.S. Environmental Protection Agency.

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# Editorial

## A Call for Climate Security

In America, our view of the wider world is often colored by concerns about security. But today, international security is about more than tariffs and terrorism — it's about protecting access to clean water and the productivity of the farms that feed the world.

Sea level rise might be a punchline for certain political audiences, but to the Pentagon, the U.S. Central Intelligence Agency and nations around the world, an unstable climate is no idle threat.

"The world is barreling down a path to heat up by 4 degrees [Celsius] at the end of the century if the global community fails to act on climate change, triggering a cascade of cataclysmic changes that include extreme heat-waves, declining global food stocks and a sea-level rise affecting hundreds of millions of people," the World Bank cautioned in a November report.

Climate change will likely hit developing countries hardest but its effects don't respect international borders. We're directly affected by increasingly violent storms and droughts, but those are just the most apparent effects of global temperature increases.

When 11 retired generals and admirals were convened by a nonprofit research organization to assess the situation, their report warned, "Climate change can act as a threat multiplier for instability in some of the most volatile regions of the world, and it presents significant national security challenges for the United States."

To create a truly secure world, we need sound energy policies that foster a stable climate.

Talk of energy security inevitably raises cries of "Drill, baby, drill!" But establishing American energy independence on the back of fossil fuels means pushing the world further toward climate chaos and spawning humanitarian and ecological crises with a web of impacts more difficult to predict or understand than a flooded New York subway system or the demise of Appalachia's salamanders.

Any energy policy that threatens global access to food and water, that pushes island nations underwater or leads to the destruction of a region's natural heritage will not lead to a secure future. If we let our elected leaders get away with threatening world stability in the name of false energy "security" that benefits a few in the short term and none in the long term, we will have failed our children and the planet.

Instead, we need to realize our potential by building an energy system that prioritizes efficiency and renewable sources of power, and we need to do it now.

Across Appalachia and around the world, communities are coming together to support smart growth and sustainable practices and make the clean energy future a reality. The climate crisis is global, but the solution begins at home.



## Viewpoint

### Lincoln and Climate Science

By Dr. Bill Kovarik

Abraham Lincoln used to tell a story during the darkest days of the Civil War. Although the story was omitted from a recent movie about Lincoln, it is still worth recalling. It goes like this:

When Lincoln was a young man in Illinois in 1833, he was roused from his bed late one night by his frantic landlord. "Abe! Abe! Wake up! The day of Judgment has come," the landlord shouted. Lincoln threw open the window and saw fearful neighbors in the road and, above them, a spectacular sky lit up by the Leonid shower of meteors. At first he shared their dismay. "But looking back of them in the heavens," Lincoln said, "I saw all the grand old constellations with which I was so well acquainted, fixed and immovable and true in their places."

Thirty years later, Lincoln would tell this story to his generals and say, "No, gentlemen, the world did not come to an end then, nor will the Union now."

After the contentious media-driven elections of 2012, it often seems

that nothing in our own times is fixed, immovable or true in place. But that would be a misperception. We only need to look behind those falling stars to see so many of our grand old constellations still fixed and true in their places.

In the height of the campaign, many pundits decried the lack of debate about climate science. Yet there in the final days of the campaign, we saw President Barack Obama and New Jersey Gov. Chris Christie working together to mitigate the impacts of superstorm Sandy. All it took was an example of human values in the face of catastrophe to make it "safe" to talk about climate again.

Many states in recent years — particularly Virginia and North Carolina — have made it difficult for regional planners to find and use climate data. But while those stars were falling, a constellation of climate research centers — in the works since the Bush administration — was emerging as part of a federal scientific effort at the National Oceanic and Atmospheric Administration and the Department of the Interior. True in its place, ba-

sic science remains unshaken by the ups and downs of local politics.

Despite a massive Appalachian media offensive by the falling stars of the coal industry, basic economics and environmental law are still fixed and true in their places. Blowing up mountains and ruining water supplies in order to make a quick buck is no more economically viable than it is environmentally sustainable, as it turns out. Ask Patriot Coal Co., whose board decided in November 2012 to stop mountaintop removal coal mining because it was not in the company's long term interests.

Human values, along with environmental science and basic economics, are among the constellations that are still fixed and true in their places.

Lincoln would be proud.

Bill Kovarik is a professor of communication in the Blue Ridge mountains of southwestern Virginia. He teaches science and environmental writing, media history and media law, and has written extensively about environmental and energy issues for publications ranging from the New York Times to The Appalachian Voice to Earth Island Journal. He is currently working on a history of renewable energy. His research was recently mentioned in Neil Young's book "Waging Heavy Peace."

## Appalachian Elogy by bell hooks: "an avalanche of splendor"

By Matt Grimley

bell hooks doesn't claim to be an Appalachian. But through her latest collection of poems, *Appalachian Elogy*, (University Press of Kentucky, 2012) we get the bigger message: that doesn't matter.

bell hooks was born in Hopkinsville, Ky., in 1952 with the name Gloria Jean Watkins. A celebrated teacher, author and activist, she has written over 30 books on issues such as social class, environmental justice, race and gender. She is currently a professor at Berea College.

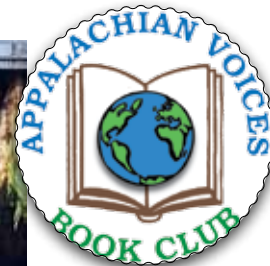
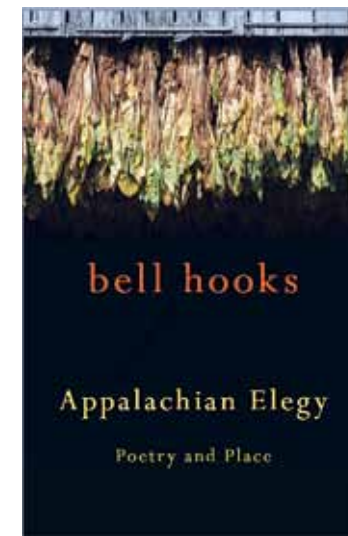
As a tribute to her grandmother, Watkins adopted "bell hooks" as her name, decapitalizing it to emphasize the importance of her writing as opposed to who she is.

What really matters, then, is the process of creation and re-creation, the poetry itself.

As she writes in her introduction, these poems "extend the process of

lamentation," repeating "sorrow sounds" and connecting the pain of a "historical Kentucky landscape ravaged by war and all human conditions that are like war." They do not only reflect the domination of subjugated peoples and demolished lands; they also give voice and control to a lost past, "until history/rewritten resurrected/returns to its rightful owners."

Upending that history are her poems. They are pillars of moods. Monosyllabic with short lines, they echo the beats of a music that plays incessantly. It is no wonder that *Appalachian Elogy's* poems remain untitled and merely enumerated: by a sequence of numbers, as if by minutes or years, they mark the almost



indistinct passage of time with echos of images past and present.

The images of the poems recur like dreams, both good and bad. Animals such as horses trot

in and out of the pages, reflecting the introduction's proposition: "Nowadays we can hear tell of black jockeys ... But where are the stories of all enslaved black servants who worked with horses, who wanted to mount and ride away from endless servitude?"

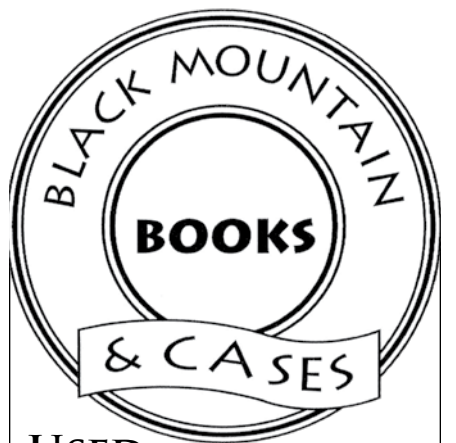
The horses gather at "morning dawn" in poem 28. They are "ready to run/speaking a language only they can hear," displaying limitless possibility and a sacred community that defies interpretation. There is "no need to tame and mount," because they have simultaneity and the will "to reach the beyond." It's mystic, the kind of relationships that hooks describes, because they are an ecology of their own.

We begin to understand why she declares, "I am wild." The wildness offers her a place of contemplation, of strength in beauty and imagination. In poem 55, the "backwoods souls" chant that "we a people of plenty/back then/work hard/know no hunger/grow

food." They did not know about any political or sociological "culture of poverty," nor did they need to. They instead possess "the promise/of an eternal now" and the freedom of timelessness.

hooks may not identify as Appalachian, but she finds that her tools — openness, imagination and living by the congruency of "what one thinks, says, and does" — allow her to belong to the Appalachian past of her ancestors, "black, Native American, white, all 'people of one blood.'"

If this book is a dirge, it is a joyful dirge because it wants to make whole a shattered past. It wants us to celebrate that which is constant because it is our means of creating the future. In that, there is hope and there is a knowledge that bell hooks was — and will continue to be — a triumph in and beyond Appalachia.

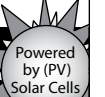


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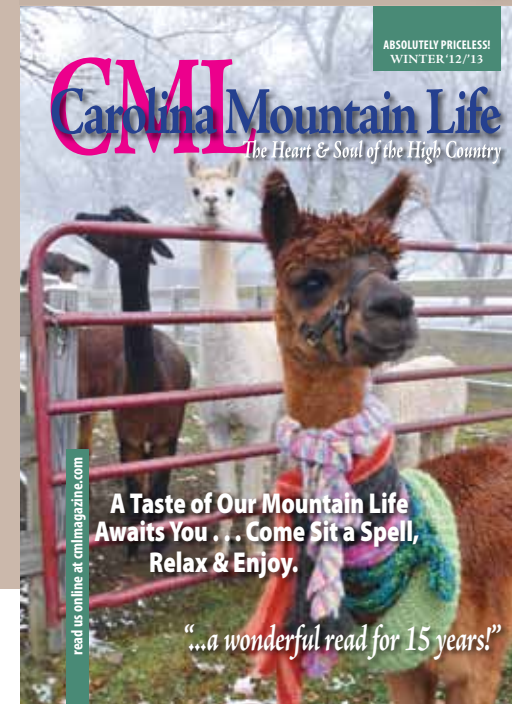
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### Membership Spotlight: Silas House

Award-winning writer Silas House was born and raised in Appalachia, in the rural mountains of Kentucky. He drew from his childhood memories of Laurel and Leslie counties for the basis of his first three novels, and has composed press kits for some of Nashville's top musical artists. Among his other accomplishments, Silas created the Mountain Heritage Literary Festival, served as the NEH Chair in Appalachian Studies at Berea College, acted as contributing editor for *No Depression* magazine, and was chosen as Appalachian Writer of the Year by Shepherd University in 2010.

In his "free" time, Silas also serves on the board of directors for Appalachian Voices, and it is in his activism where his love of Appalachia truly shines. We caught up with Silas to talk to him about his work to stop mountaintop removal coal mining and protect the mountains of Appalachia, and here is what he had to say:

**What makes you an Appalachian?** I think what makes a person Appalachian is if they care about this place, if they work to preserve and protect it, if they strive

to understand it in all of its complexities. I was born and raised here and I believe the mountains and their people are in my bones and blood. But I also know plenty of people who are not from here originally but care deeply about the place and work hard for it ... I'd call them Appalachians, too.

#### What inspires you to protect the region and be an advocate?

One of the main tenants of being an Appalachian is preservation. We like to preserve everything: stories, quilts, photographs, relationships ... even our food, since we take such great pride in canning and such. Appalachians have been told for over a hundred years now that we're "a vanishing people" or "a disappearing culture." So I think that makes us hold on with white knuckles. I think being told that we are fading away as a culture compels us to preserve as much as we can. So it seems only natural to me that we preserve that most



obvious of things: the land, particularly the mountains with which we identify so strongly. I've heard people say, "We will tear down these mountains to be able to stay in them." That logic is so foolish. So if we are going to call ourselves Appalachians then we must preserve the Appalachian mountains. Without them, we WILL vanish.

#### What do you love about being part of the AV family?

I love being part of an organization that is really and truly doing something every single day to save this land and its people.

I am incredibly proud to be a part of the AV family and I tell everyone I can about the great work AV is doing throughout the region and the country. I know of no other group so committed to this fight and I think that AV really understands the region in a way few others do, especially the aspects of preservation in all of its forms, whether that be its mountains or its literature or its dialect.

### Seeing is Believing: New Evidence of Mountaintop Removal's Impact in Tennessee

The coal industry is fond of saying that there is no mountaintop removal taking place in Tennessee, so we wanted to see for ourselves. Appalachian Voices recently teamed up with the filming crew from "Coal Country" and SouthWings' award winning pilot Susan Lapis to take an aerial tour of coal-mining counties in the Volunteer State. What we saw, and photographed, was shocking. Using the images we captured, we've created a new online resource where you can judge for yourself whether or not the mountains of Tennessee are having their tops removed. Flying over the Cumberland Plateau in October during peak leaf week, we were also able to capture some stunningly beautiful views of Elk Valley, TVA's 29 MW wind farm on Buffalo Mountain, and some of the most beautiful and biodiverse ecosystems in the United States. Visit AppVoices.org/TNMTR, and we invite questions and submissions to TN@Appvoices.org.



### Happy Birthday, Clean Water Act!

The Clean Water Act celebrated 40 years of protecting America's waterways on Oct. 18. Appalachian Voices' Red, White and Water campaign celebrated the success of this landmark legislation with the report, "The Clean Water Act at 40: Real People, Real Successes, Real Threats."

The report highlights examples from around the Southeast that show how Clean Water Act programs have helped communities restore water quality in local waterways. The report also analyzes the voting record of the southern congressional delegations on recent anti-clean water bills.

"The Clean Water Act is creating jobs and economic benefits, restoring impaired fisheries and cleaning up famed white-water tourism destinations," says Sandra Diaz, coordinator of the Red, White and Water campaign with Appalachian Voices.

Highlights from the report include an oyster farm on the Chesapeake Bay, dairy farms in the Carolinas and a watershed polluted by coal mining in West Virginia.

When the Clean Water Act passed in 1972, all but one of 65 representatives from the southeastern states voted in support. But in the last two years, the region's representatives have voted more often than not in favor of weakening clean water



laws, as tallied in the report.

Through our Red, White and Water campaign, Appalachian Voices co-hosted a birthday party on Oct. 18 on Capitol Hill in conjunction with the Clean Water Network and others. Rep. Jim Moran of Virginia, a champion of protecting clean water laws, was on hand to cut the birthday cake.

Also present was Mike King, who was featured in the report; he spoke about how the Clean Water Act enabled him and his community to revive a waterway that runs behind his home in Montgomery, W. Va. Morris Creek went from being "orange and sometimes white, depending on what the coal company was doing, with a horrible smell of rotten eggs," to a creek that now supports trout and other fish.

"We wanted to show that the Clean Water Act is helping real people so that decision-makers understand the consequences of weakening the Act," says Diaz.



### AV and iLoveMountains Launch No More Excuses Campaign

Appalachian Voices, in conjunction with iLoveMountains.org, recently launched a two-pronged campaign to solicit reelected President Obama to end the devastating practice of mountaintop removal coal mining.

With our new report summarizing the human cost of mountaintop removal coal mining and a nationwide campaign through iLoveMountains.org, we are telling the Obama Administration, "No More Excuses — End Mountaintop Removal Now."

Since the president took office, more than 20 peer-reviewed studies have concluded that mountaintop removal contributes to significantly higher rates of birth defects, cancer, and cardiovascular and respiratory diseases among individuals in the region where the destructive form of mining occurs.



The No More Excuses campaign features children who are already campaigning against mountaintop removal through various groups, including some children that have lived in or near areas impacted by mountaintop removal.

Shortly after winning the election in 2008, President Obama said: "Science holds the key to our survival as a planet and our security and prosperity as a nation... It's about listening to what our scientists have to say, even when it's inconvenient — especially

when it's inconvenient." During his first administration, the U.S. Environmental Protection Agency made steps to curtail the rubber-stamping of permits, which made it more difficult for companies to obtain mountaintop removal mining approval, but the measure was struck down by a federal court.

Our special report, "Mapping The Human Cost of Mountaintop Removal," is also a companion piece to an interactive mapping page unveiled last spring on iLoveMountains.org and designed by Appalachian Voices' technology team. To read the report, visit [appvoices.org/the-human-cost](http://appvoices.org/the-human-cost).

Please join us in telling the Obama Administration that there are no excuses to legitimize the destruction of the Appalachian Mountains: visit [ilovemountains.org/no-more-excuses](http://ilovemountains.org/no-more-excuses) to send a letter today.

### Organizational Roundup

#### Fighting Tennessee Valley Assumptions

Appalachian Voices recently joined forces with the Sierra Club and Tennessee Clean Water Network to call on the Tennessee Valley Authority to not overhaul its aging Gallatin Fossil Plant without fully considering cleaner and cheaper options. TVA unveiled a draft Environmental Assessment for plans to sink over \$1 billion into the aging coal-fired power plant for new scrubbers, but their public comment period only provided a thirty day-window for citizens to weigh in via mail and did not include a public hearing. The letter by our network of groups urged TVA to complete a much more comprehensive Environmental Impact Study, extend the comment period, open up discussions for public hearings and provide key background documents supporting its assumptions.

TVA's plans would raise customer bills for years to come, even though a recent report shows that if the government-owned utility invested the same

amount of money in energy efficiency, it could replace the Gallatin coal plant by 2015 and save TVA customers billions of dollars over the next twenty years while simultaneously reducing dangerous air pollution.

#### Dirty Money and Dirty Power in Virginia

On the eve of an annual energy conference hosted by the governor of Virginia, Appalachian Voices joined Sierra Club and Chesapeake Climate Action Network to released a timely report revealing the influence that coal companies and utilities wield over Virginia energy policy. In the report, "Dirty Money, Dirty Power," the groups analyzed more than a decade of publicly available data to draw connections between political campaign contributions and the poor record of Virginia's government in advancing energy efficiency and renewable programs compared to other states. The day

following the release, Tom Cormons and Nathan Jenkins of our Virginia team attended the governor's conference — sponsored by energy giants such as Dominion Power, Alpha Natural Resources and Appalachian Power — and spread a little clean energy love in what was otherwise a very coal-friendly conference. Visit [appvoices.org/reports](http://appvoices.org/reports).

#### A Fond Farewell

The Appalachian Voice and Appalachian Voices would like to bid a fond farewell to our clever visual visionary, Meghan Darst, as she heads off to explore the marketing world wilds of Charlotte, N.C. Meghan started as an intern a year and a half ago, and soon jumped into a vital role on our Communications team. We will miss her sweet nature and willingness to tackle any graphics job -- big or small. Best wishes!



Appalachian Voices is committed to protecting the land, air and water of the central and southern Appalachian region. Our mission is to empower people to defend our region's rich natural and cultural heritage by providing them with tools and strategies for successful grassroots campaigns.

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### AppalachianVoices BUSINESS LEAGUE

New & Renewing Members — October / November 2012

Farnum and Christ Travel — Bristol, Tennessee  
Mt. Rogers Outfitters — Damascus, Virginia

To become a business member visit [AppalachianVoices.org](http://AppalachianVoices.org) or call us at 877-APP-VOICE



## The Appalachian Voice

171 Grand Boulevard

Boone, NC 28607

[www.appalachianvoices.org](http://www.appalachianvoices.org)

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Skiers make tracks through a captivating winter scene on Rich Mountain game land near the Tennessee / North Carolina border in this stunning photo by Kristian Jackson, an outdoor recreation and education professional living in Boone, N.C. "I feel a strong connection to the Southern Appalachian mountains and am impelled to promote and protect this stunning and unique environment," he says. View more of his work at [kristianjackson.smugmug.com](http://kristianjackson.smugmug.com)

# GET INVOLVED environmental & cultural events in the region

### Tennessee State Parks Running Tour

**Every Saturday from Oct. to March:** Run with the pack! The 34th annual State Parks Running Tour features 20 road races and one trail race held in 21 state parks throughout Tennessee each winter. Distances vary from five to 13 miles. Walkers welcome. Pre-registration \$20, no-shirt option \$6. Visit: [tn.gov/environment/parks/RunningTour/](http://tn.gov/environment/parks/RunningTour/)

### Crockett Christmas

**Dec. 8, 4 p.m. - 8 p.m.:** Get into the holiday spirit with a glimpse of Christmas past. Davy Crockett's birthplace cabin will be decked in pioneer spirit, complete with a nice warm fire, traditional storytelling, hot wassail and period edibles. Davy Crockett Birthplace State Park, Lawrenceburg, Tenn. Visit: [tn.gov/environment/parks/events/](http://tn.gov/environment/parks/events/).

### Fiber Animal Farmer's Forum

**Dec. 10, 11 a.m. - 2 p.m.:** A special forum on increasing value and local markets for fleece and fiber products grown and produced in WNC and surrounding areas. Panels will include farmers as well as local fiber users such as weavers, spinners and retailers. WNC Regional Livestock Center, Canton, N.C. Lunch to be provided, please RSVP to Jean Castle at 828-665-1386 or [lorien@alpaca fleece.com](mailto:lorien@alpaca fleece.com).

### Tourism and Electric Vehicles

**Dec. 12, 5:30 p.m.:** The 436th edition of Asheville Green Drinks will feature Stan Cross and his long-range vision to incorporate sun-powered electric car charging stations and special EV rental vehicles into Asheville, N.C.'s tourism industry. Posana Cafe, Asheville, N.C. Visit: [ashevilleregiongreendrinks.com](http://ashevilleregiongreendrinks.com)

### Small-Scale Biofuels Workshop

**Dec. 13:** The Biofuels Center of North Carolina will host a workshop at North Carolina A&T State University featuring discussions on developing

successful smaller-scale biomass and biofuels production projects. A tour of the university's biofuels research and development facilities will be offered. Greensboro, N.C. Contact Leif Forer at [lforer@biofuelscenter.org](mailto:lforer@biofuelscenter.org) or visit: [biofuelscenter.org](http://biofuelscenter.org)

### 113th Annual Audubon Bird Count

**Dec. 14 - Jan. 5:** The National Audubon Society's annual winter bird count takes place across the Western Hemisphere to track avian populations. From feeder-watchers to field observers, volunteers go out over a 24-hour period to count birds in a massive citizen science effort for bird conservation. To find a count near you, visit: [birds.audubon.org/christmas-bird-count](http://birds.audubon.org/christmas-bird-count)

### Artspace Traveling Artists Benefit

**Dec. 14, 5:30 p.m.:** Help grow the Artspace Charter School's Traveling Artists program. Music by The Cody Wright Band, Big Ben and the Clocktowers, The Warren Wilson Bluegrass Band, and Phil Jamison and The Warren Wilson Old-Time String Band. Featuring beer, food, and a silent auctions of handmade crafts, furniture and metalwork. Suggested donation \$12. White Horse Black Mountain performance center, Black Mountain, N.C. Visit: [whitehorseblackmountain.com](http://whitehorseblackmountain.com).

### New Year's Day Yadkin River Hike

**Jan. 1, 1 p.m.:** This moderately difficult 5-mile hike will take place in the Yadkin River section of Pilot Mountain State Park. Sleep late and meet at for an afternoon hike. Bring water, snacks and rain gear. Pilot Mountain State Park, Pinnacle, N.C. Contact Joel Wooten before 9:00 p.m. at 336-679-8672.

### Sustaining Family Farms Conference

**Jan. 23 - 27:** The 22nd annual Southern Sustainable Agriculture Working Group conference is for serious organic and sustainable producers or those

interested in creating more vibrant community food systems. Pre-conference courses and field trips, eight tracks of practical conference sessions, a trade show, Taste of Arkansas dinner and more. Statehouse Convention Center in Little Rock, Ark. Visit: [ssawg.org](http://ssawg.org)

### 14th Annual Blowing Rock Winterfest

**Jan. 24 - 27:** Join residents of the N.C. High Country to celebrate the fun side of winter. Includes the popular Polar Plunge into Chetola Lake, ice carving demonstrations, hay rides, a cross country ski and snow equipment exhibition, nightly bonfires, wine auction, live bluegrass, Winterfeast and more. Tickets to the famous Chili Cook-off go fast, and so does the chili, so get there early! Prices vary for by event. Blowing Rock, N.C. Visit: [blowingrockwinterfest.com](http://blowingrockwinterfest.com)

### The Building Conference

**Jan. 31 - Feb. 2:** This three-day event will focus on assisting the region's communities with designing, funding, building, appraising, supporting and maintaining efficient, healthy and affordable housing and communities. Training sessions address core and advanced building knowledge, designing for improved public health, policy, planning, reclamation, and innovation in materials and processes. \$199. Waterfront Place Hotel, Morgantown, W.Va. Visit: [thebuildingconference.com](http://thebuildingconference.com)

### Farm School for Beginners

**Feb. 7, 9 a.m. - 5 p.m.:** This day-long course is designed for those with 10 years or less farming experience. Includes presentations from successful farmers plus extensive handouts and resources from Virginia Tech's Whole Farm Planning curriculum. Complementary Farm Tour on Friday morning; lunch included. Holiday Inn-Koger Center, Richmond, Va. Cost is \$75. Visit: [vafb.org/conference/conference-2013/](http://vafb.org/conference/conference-2013/)

Email [voice@appvoices.org](mailto:voice@appvoices.org) to be included in our Get Involved listing. Deadline for the next issue will be Friday, Jan. 26, at 5 p.m. for events taking place between Feb. 8 and March 10.

### Mountain Justice Spring Break - Va.

**March 1 - 11:** A week-long event sponsored by RReNEW Collective and Southern Appalachian Mountain Stewards to introduce citizens to mountaintop removal coal mining and other environmental issues in Appalachia. Meet and support folks working to build a better future for Appalachia, build skills as organizers and change agents, and enjoy hiking and volunteering with local service projects. Registration fee is on a sliding scale. Wise County, Va. Visit: [mjsbvirginia.wordpress.com/](http://mjsbvirginia.wordpress.com/)

### Mountain Justice Spring Break - W.Va.

**March 10 - 17:** Mountain Justice will bring together coalfield residents, college students, environmentalists and concerned citizens for a week of educational workshops to learn more about the effects of mountaintop removal coal mining, hydrofracking and the skills and visions needed to build a sustainable energy future in Appalachia. Registration fees vary. Doddridge County Park, West Union, W.Va. Visit: [mjsb.org](http://mjsb.org)

### 36th Annual Appalachian Studies Conference

**March 22-24:** An annual conference to engage dialogue, research, scholarship and creative expression in the context of the Appalachian region. The 2013 conference theme is "Communities in Action, Landscape in Change," exploring historical and contemporary Appalachian communities, landscapes and environmental spaces. Organized by the Appalachian Studies Association. Registration fees vary. Appalachian State University, Boone, N.C. Visit: [appalachianstudies.org](http://appalachianstudies.org)