## Mountain Madness

West Virginia's coal companies are altering the state's very surface, and no one seems to have the power--or the will--to stop them.

## **By Ted Williams**

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**Mountaintop removal** is a quick, cheap method of mining, suddenly popular in Appalachia (at least with the coal industry). Twenty years ago the industry could cut only about 150 feet down into a mountain. Now that it can cut down 600 to 700 feet, the Appalachians really aren't in the way anymore. So instead of taking the coal from the mountains, it takes the mountains from the coal. If you drive over the coal seams of West Virginia, Kentucky, Tennessee, Virginia, and Pennsylvania, or even if you live on them, you can catch only glimpses of mountaintop removal because roads and communities are sealed in valleys and because the industry spares no effort to keep the public away from active mining sites.

So on the bright, mild morning of February 7, Susan Lapis of SouthWings--a group of volunteer pilots who show journalists and others the footprints of industry as they exist on the face of the earth instead of on the pages of glossy promos--packed me into her Cessna 182 and punched a GPS line to the coal fields of southern West Virginia. Nowhere in the nation are the effects of "mountaintop mining," to use the coal industry's euphemism, more obvious.

But even "mountaintop removal" is a euphemism. It connotes a neat pruning operation, a single mountain separated from its peak the way you'd clip a rose from a bush. This is more like using a rototiller on the whole garden. What I saw was mountain-range removal. Fifteen minutes out of Charleston's Yeager Airport, the most diverse and productive temperate forest on earth gave way to sprawling brown ulcers strewn with black piles of slate spoil and dingy pits full of half-frozen slurry--a toxic brew of water, coal dust, mercury, lead, arsenic, copper, and chromium. There are 600 such pits in Appalachia. Last October one of them--created largely by mountain-range removal by A.T. Massey--ruptured, spilling 250 million gallons of slurry into the Ohio River system in southeastern Kentucky and burying or poisoning 90 miles of stream; polluting public water supplies; clogging water-treatment plants; shutting down schools, restaurants, laundries, and power generation; and wiping out fish, snakes, turtles, frogs, salamanders, mussels, and other aquatic fauna. It was God's fault, declares Massey's legal team--His "act."

At 4,200 feet we could smell the smoke from the last scraps of forest being scorched off doomed mountains. For almost an hour at an airspeed of 140 knots we saw other mountains in various stages of removal radiating from all compass points. White-rimmed drill holes, spaced like bristles in a hairbrush, marked the spots where the next chunks of mountain would be blown off the coal seam. Where charges had been detonated, draglines--20-storyhigh shovels with maws as wide as football fields--consumed pieces of mountain in 130-ton bites. Ad writers for Arch Coal proclaim that "mountaintop mining is good for West Virginia, and it's the right thing to do."

On the "reclaimed" sites, topsoil, roots, and stumps had been dumped onto streams, along with "overburden," as the industry calls broken mountains. The steep, triangular faces of recently buried valleys had been terraced like highland rice paddies. Down their centers ran straight, rock-lined gutters--the new streams. Rubble had been bulldozed and seeded with native and alien vegetation. A few trees had been planted in tiny squares. It all looked as if God had rested on the first day and subcontracted the rest of creation to the U.S. Army Corps of Engineers.

In 1977 Congress outlawed this kind of coal extraction when it passed the Surface Mining Control and Reclamation Act (SMCRA). The act requires that only a small area be disturbed at one time, but in the mountains that's not possible. So the Interior Department's Office of Surface Mining (OSM) and the state regulatory agencies it has authorized to enforce SMCRA--such as the West Virginia Division of Environmental Protection (DEP)--looked the other way. SMCRA requires that there be no surface mining within 100 feet of a stream, but in the mountains there's no place to dump overburden except on streams, so the agencies looked the other way. SMCRA requires that each site be restored to its "approximate original contour," but you can't put a mountain back together, so the agencies looked the other way. If a site is not restored to its approximate original contour,

SMCRA requires that it be converted to a "higher and better" use, a shopping mall or an airport or some such development--but who would pick their way through Appalachia to do business on a remote mountain stump? So the agencies looked the other way. Rules that weren't ignored were done away with by changing definitions. For example, if a "valley fill," as the industry calls its spoil dumps, contains less than 80 percent nondegradable rock (rock that won't break under pressure), fill must be trucked in, compacted, and large material used to make a drain. But it's cheaper to drop everything onto a stream, so the regulators declared all rocks, even shale, to be nondegradable.

A large part of the problem is that the regulators and the coal moguls are frequently the same people, flouncing between offices in a perpetual game of musical chairs. Regulators come from the coal industry (as did the three previous directors of the West Virginia DEP, for example). And when these officials step down, the industry clutches them to its breast. In April 2000, OSM director Kathy Karpan was removed from her post after she unsuccessfully negotiated with the National Mining Association about assuming its presidency.

A survey of eastern coal states by the U.S. Fish and Wildlife Service--incomplete because some mining regions weren't evaluated--turned up 897.2 miles of streams buried by mountain-range removal. In West Virginia the service checked only 5 of 13 coal counties but still found 470 miles of obliterated stream. Parts of the Little Coal River that once supported commercial barge traffic are now so choked with mining waste they're not even navigable by canoe.

While mountain removers traditionally violate SMCRA by interring streams that flow for more than six months of the year, the law does allow the sacrifice of streams that flow less than that. But, if anything, such streams are more important, argues Ben Stout of Wheeling Jesuit University in Wheeling, West Virginia. Stout is working on the environmental-impact study resulting from a successful citizens' lawsuit against the DEP and the U.S. Army Corps of Engineers that held that their stream-filling permits violated both SMCRA and the Clean Water Act. "The coal industry prefers to call these streams 'dry washes,' " he says. "But at 175 permit-application sites in West Virginia and Kentucky, we found all 8 orders of aquatic insects we were looking for--in all, 80 taxa, including perennial species. The biological community begins in watersheds as small as six acres. In fact, the most diverse communities start right up there at the spring seeps. The majority of taxa we found are leaf shredders; when they shred leaves the particles feed the whole downstream community. And emerging insects export this energy back to the forest in a form that's available to salamanders, frogs, fish, and birds. An intermittent stream is the link between a forest and a river. Fill it, and you break that link."

Once a rivertop gets buried, the rest of the system is not only starved but poisoned. "The runoff from the toes of these valley fills is laden with aluminum, iron, and manganese," says Stout. "It's nasty, nasty stuff."

So species such as forest-interior birds, most of which depend on the insects that billow out of rich forest streams, lose their food at the same time their habitat is destroyed and fragmented. Warblers, for example, are being devastated by mountain-range removal. Among the many victims is the cerulean warbler, a blue jewel whose core breeding area overlaps the Appalachian coal fields and whose population is down an estimated 70 percent, having declined at a rate of about 4 percent a year since 1966. Audubon, the Southern Environmental Law Center, and 26 other environmental groups have petitioned for it to receive threatened status. "The cerulean is leading the decline of warblers that depend on old, extensive forests," comments Chris Canfield, director of Audubon's North Carolina office. "If we can protect its habitat, lots of species lower down on the watch list will also benefit."

Many birds, however, thrive in fragmented forests, as the coal industry's PR ministers tirelessly point out. While we're not running out of these species--wild turkeys, killdeer, cowbirds, etc.--the message is that mountain-range removal is a blessing, creating habitat for wildlife and people alike. Without "mountaintop mining," say the ministers, Appalachia would be too hilly for such social benefits as the prison scheduled to be built in Logan County. According to the president of Princess Beverly Coal, land is "200 percent better" after the company removes mountains. Appalachian schools welcome the PR ministers and the literature they tote, such as Coal Mining Counts, a coloring book in which a sentient rock truck named Smiley declares, "Let's slice the mountain and look inside. . . . After we mine the coal, we must put back the rocks, dirt, and plants. This is called reclamation."

The PR ministers at Arch Coal and A.T. Massey--the companies responsible for most of what I'd seen from the air--said they couldn't help me when I asked to be given a ground tour of their most beautiful reclamation. Instead, they referred me to one Bill Raney, president of the West Virginia Coal Association. "Winter," averred Raney, "is the absolute worst time" to look at reclamations. "If you're interested in doing a balanced story, you need to come in May." When I informed him that this would not be possible, he offered to supply Audubon with photos made when the reclamations had been more presentable. Basically, the deal was that he'd show me a reclamation if I got Audubon's art department to let him illustrate my article. "Let me tell you," he exclaimed, "we have entertained and opened ourselves up to everybody in the last two years, and all we ever see from these publications is a picture of an active mining site. That's why I'm so insistent; as a matter of fact, I'm about three-quarters pissed about the whole thing."

"Have there been any balanced stories?" I inquired.

"They all promised to be balanced coming in, but they're not."

"You mean not even one publication has printed a balanced story on mountaintop removal--ever?" He paused, then allowed that maybe some local ones had, but he couldn't name one. "No," he said emphatically when I asked if he'd meant The Charleston Gazette, which had investigated 81 permits issued by the DEP and found that only 20 had been written legally.

Later in the day, and still seeking to be shown a good reclamation site, I called the West Virginia Mining and Reclamation Association. Bill Raney picked up the phone there, too. "We done some research on you," he intoned. He'd read a piece on mountain-range removal I'd written for a fishing magazine called Fly Rod & Reel. He said it wasn't balanced.

So I went to see Larry Gibson, who maintains the Stanley Heirs park and cemetery in Kayford--the only place in West Virginia where nonindustry people can legally inspect reclaimed and active mountain-range removal sites from the ground. Gibson's great-great-greatfather Crockett Stanley settled this hollow in 1820.

The only thing in heaven, hell, or this world that frightens Larry Gibson is a dragline. A year ago three men ran his truck into Cabin Creek, then stood on the bank, laughing at him. Maybe this and other such incidents have something to do with his "unbalanced" bumper stickers, all of which are still in place: "If nothing grows on it, it must have been mined"; "Almost level--West Virginia"; "Stop Mountaintop Removal"; "Tax coal"; "Real miners do it deep in the dark." People who imagine that Gibson has deprived them of job opportunities slash his tires fairly regularly, smash his windows, knock over the park's outhouses and signs, and shoot up the buildings. Two years ago he wore out four pairs of tennis shoes on a 540-mile "walk for the mountains" across West Virginia, this a week after undergoing angioplasty and the insertion of two stents.

As a child, Gibson lived on Kayford Mountain, planting corn, tending bees, milking cows, churning butter. If "mountaintop mining" has been "good for West Virginia," it hasn't been good for the town of Kayford. The farms are gone; the church is gone; the school is gone; the town--all 800 houses--is gone; and the mountains to the west and north are gone. Nine years ago Gibson talked his 538 relatives into not selling out to the coal industry and, instead, making their 50 acres a public park. "I told the guy from Massey he couldn't buy this land," says Gibson, "and he looks at me and says, 'We ain't seen nothing we can't buy.' Well, he has now."

In the cemetery Gibson showed me "flyrocks" dropped by nearby blasting; one I couldn't lift. I righted Patricia Fraker's headstone, which had been knocked off its base by recent blasting. A sharp-shinned hawk shot low over the graves, heading east toward richly forested mountains slated for removal. Five hundred feet below us lay the stumps of mountains that 10 years ago had been at our level or higher. Before the mountains were removed they had been clad in red, black, and sugar maple; pignut, mockernut, and shagbark hickory; cucumber and umbrella magnolia; red, black, and scarlet oak; black birch; beech; ash; butternut; yellow poplar; black gum; sourwood; princess tree; white chestnut; black locust; sassafras; basswood; ironwood; viburnum; pawpaw; redbud; and dogwood, to mention just a few of the species.

"When are they going to reclaim this section?" I asked, stepping onto sparsely grassed rubble furrowed by runoff.

"They already have," he replied, pointing to a single black locust sapling protruding from the slope like a toothpick in a stuffed mushroom. "In spring," Gibson continued, "we used to lose the sun at 5:00 P.M. Now we don't lose it till 8:30. The industry calls that an 'improvement.'" The cemetery is sloughing onto the mountain stumps like a wave-cut beach into a rising tide.

Frank Gilliam, a professor of biological sciences at Marshall University, in Huntington, West Virginia, found it "amazing" that the industry thinks it can take a mountain apart, reassemble some of it, and bring back the ecosystem. "It's like taking apart someone's clock, then 'restoring' it by stuffing some of the parts into a box." So Gilliam and one of his graduate students drove to Kayford and collected buckets of busted mountain. Then they prepared three batches of planting material--one pure rubble with the big pieces discarded (thereby biasing the experiment in favor of industry), one rubble with 25 percent topsoil, and one 100 percent topsoil. In each medium they planted three native trees--a black cherry, a yellow poplar, and a black locust. Then they cultivated the saplings under the same conditions for four months. Pure rubble or rubble with 25 percent topsoil added resulted in minimal growth at best. In the 25 percent mix, stems of black locust seedlings, a favorite of the industry because they fix nitrogen, were only a third as thick at their base as those grown in the pure topsoil. And in the pure rubble the stems actually lost a millimeter. "The stuff just doesn't retain water," says Gilliam. "You can get a downpour, and it will be arid the next day. It's a desert in the rain." Recently, a coal mogul told Gilliam that his experiment was "soft science," then handed him a study funded by Arch Coal that hadn't been peer-reviewed.

Arch funded another study, in 1997, to assess the biological productivity of headwater streams to be buried in the proposed 5-square-mile expansion of its 13-square-mile mountain-range-removal operation along the Spruce Fork of the Little Coal River. On the Pigeonroost Branch, three benthic invertebrate sampling stations yielded only 3, 5, and 6 taxa, indicating that this rivertop was basically a dry wash.

The Pigeonroost Branch didn't look like a dry wash to me. I hiked along it with Jim Weekley, who has lived beside it for all of his 61 years and who talks like a Grand Ole Opry singer except without trying. Charged by snowmelt, the icy little rill hurried through a lush hollow where mourning cloak butterflies sucked minerals from wet duff and song sparrows caroled from ancient walnut trees. Where Arch wants to put one of its valley fills, half a dozen wild brook trout hovered over clean gravel, their flanks orange as a mountain sunrise. Weekley used to catch them here when he was a kid. Now his grandchildren do. Arch used to say they didn't exist. After Arch had finished surveying the Pigeonroost Branch, the U.S. Fish and Wildlife Service checked it out for itself. At the same stations where Arch had found 3, 5, and 6 taxa of benthic invertebrates the agency turned up 30, 13, and 24.

If mountain-range removal has been "good for West Virginia," it hasn't been good for Pigeonroost Hollow. Twenty-six families used to live here; now it's down to Weekley. When his neighbors sold out to Arch they had to sign agreements that they'd never protest mountaintop removal. Weekley says that Arch offered him more than a half-million dollars for his seven-tenths of an acre, but that it ain't for sale.

From a high, rocky bluff we looked down on what used to be mountains, a vista no smaller and no easier on the eyes than the one from the Stanley Heirs cemetery. Perched on the bald slope like a heron on a diving raft was the \$100 million dragline they call Big John, motionless these past two years.

Half a mile west rose Blair Mountain, leased by Arch and Massey, where even 80 years ago coal was king. In 1921, when 15,000 miners waxed rebellious about working conditions, the industry engaged them in a gun battle, then requested and received help in the form of U.S. Army troops, which turned up the heat with machine guns and bombs. The Battle of Blair Mountain, the second largest civil conflict in American history, lasted 12 days, cost the lives of about two dozen miners, and knocked down union membership from 50,000 to 600. Now Weekley is leading a drive to make the mountain a national historical park.

That's one of the reasons he was hanged in effigy in the town of Logan, and one of the reasons he had a cocked pistol held to his head near the town of Madison. On August 27, 1999, when Weekley, Gibson, and a dozen of their friends reenacted the Blair Mountain protest, a pro-mining mob drove 50 miles from Logan to assault them. Placards were ripped from their hands and destroyed. They were tripped, kicked, choked, spat upon, pelted with cans, eggs, and tomatoes, and informed that they would be killed if they didn't go "back to Charleston where they belonged." Gibson ripped a man off the back of Ken Hechler, then 85 and West Virginia's secretary of state.

Last November, campaigning largely on a pro-mountain platform, Hechler was defeated in a second bid for the U.S. House of Representatives, where he had served from 1959 to 1977, laying the groundwork for SMCRA.

Negotiating with the police and clearly the mob's "spokesman," according to Hechler, Gibson, and Weekley, was Art Kirkendoll, president of the Logan County Commission. Last January Governor Robert Wise hired Kirkendoll to oversee economic development in the southern part of the state. "Wise's staff satisfied itself that Kirkendoll was not 'directly involved' in the pushing, shoving, bullying, and egg-throwing," wrote John McFerrin, West Virginia assistant attorney general, in The Charleston Gazette. "From this the governor concluded that while he might not want a thug on his staff, an assistant thug was acceptable." So it goes in coal country.

Still, it's astonishing what a few fearless mountain defenders can accomplish. Big John sits idle because in July 1998, Weekley, nine other citizens, and the West Virginia Highlands Conservancy sued the DEP and the Army Corps of Engineers on the grounds that filling streams that run for more than six months of the year is a violation of SMCRA and the Clean Water Act. In March 1999 the plaintiffs won a preliminary injunction against Arch Coal's proposed expansion near Pigeonroost Hollow. The company responded by laying off 30 workers and vowing to put 300 more out of work by shutting down the adjacent operation, a promise it kept. Fifteen hundred miners marched on Charleston. "It's a war!" brayed Kirkendoll. "It seems that the judge . . . is more interested in preserving a tadpole than he is in the people of Logan County." Most of the case was settled, including a provision that requires that topsoil be retained and sites replanted only with native vegetation.

Then, in October 1999, U.S. District Court Chief Judge Charles Haden found for the plaintiffs on the issue of burying streams. "Because there is no stream, there is no water quality," he wrote in his 49-page order. Later in the month, citing "a shrill atmosphere," he granted the defendants a stay pending their appeal, which at this writing is under way.

So mountain-range removal continues pretty much unchecked, and the future doesn't look bright for people who fancy Appalachia's original topography. If Haden's decision is overturned, they won't have many options. If it's upheld, they can look for a push led by Senator Robert Byrd (D-WV) to rewrite federal law so that valley fills are legal.

While trudging the perimeter of the eroding Stanley Heirs cemetery, I'd stopped to read the inscription on the grave of Earl Williams: "Earth has no sorrow that heaven cannot heal." Whether or not it has one now, his casket is about to follow the long shards of sod down the slope onto the mountain stumps. A mine cave-in killed Earl in 1909, when he was 14. Like the mountains that used to tower over him, like the mixed hardwood forest and the wildlife it sustained, like the valleys and the rich streams that carved them, he was a waste product of Big Coal. Now, apparently, his remains are, too.

Ted Williams reported on strip-mining violations in the November-December 1992 Audubon.

## What You Can Do

Educate your legislators about mountain-range removal. For your representatives, log on to <u>www.house.gov</u> and click "member offices." For your senators, log onto <u>www.senate.gov</u>. You may download this column from the Audubon web site and attach it to your letters. For more information, call the Ohio Valley Environmental Coalition at 304-522-0246, the Coal River Mountain Watch at 304-854-2182, or the West Virginia Rivers Coalition at 304-637-7201.