PAUL QUENEAU

A Coal-fired Eastern Elk Empire Faces New Challenges

Since the 1960s, mankind has quite literally moved mountains to get at the coal underneath the Appalachians of Virginia, West Virginia, Kentucky, Tennessee, and Pennsylvania. The aptly named mountaintop removal technique is exactly that. When a coal seam is located inside of a mountain, the overburden is blasted, bulldozed, scraped, and otherwise removed to access the coal underneath. The excess earth (holler fill) is dumped into nearby valleys. Considered safer than underground mining, mountaintop removal has leveled hundreds of peaks across an area twice the size of New Hampshire since the 1960s.

If that sounds like a disaster for wildlife, it certainly can be. But the Surface Mining Control and Reclamation Act of 1977 created reclamation laws requiring coal companies to restore vegetation as soon as possible after mining operations ceased. States like Kentucky took that a step further by requiring that mines use "non-noxious, quick growing annual and perennial plants."

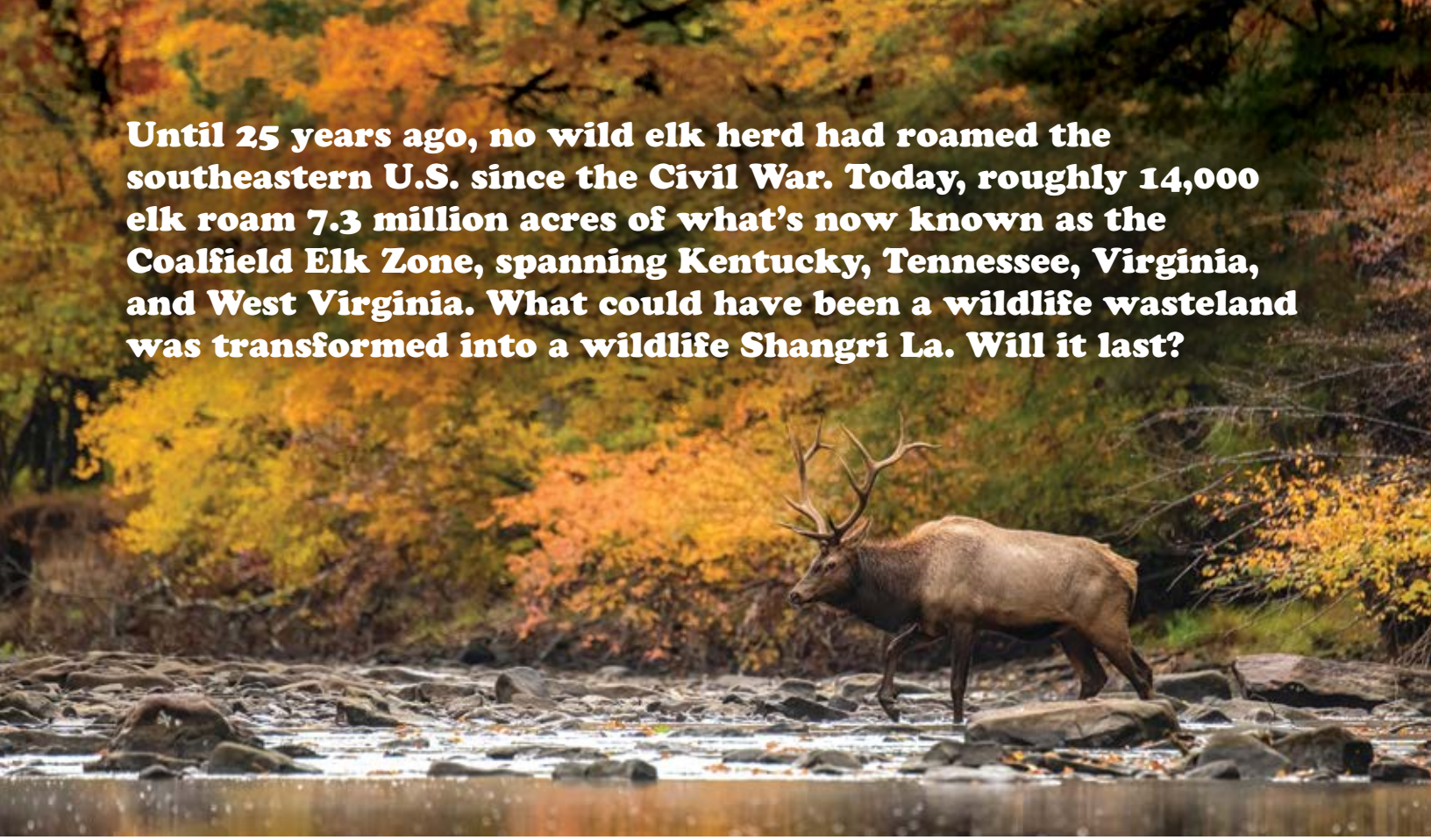
That helped set the table for an all-you-can-eat buffet for reintroduced elk herds in many parts of Appalachia. Between 1997 and 2002, the state of Kentucky released more than 1,500 elk brought from Utah, North Dakota, Arizona, Oregon, Utah, and other states at eight reclaimed mine sites in its eastern coalfields region, with staunch support and funding from the Rocky Mountain Elk Foundation and other conservation interests. What followed is one of our nation's greatest wildlife restoration success stories of modern times.

The rehabilitated mines where managers released elk sprouted rich grasslands that sent reproduction rates of Kentucky's fledging herd into the stratosphere. Biologists soon recorded an unprecedented birth rate of 90 calves per 100 cows. Even more impressive, 92 percent of those calves survived into their second year. Even the nation's most prolific western elk states, like Colorado, don't see that off-the-chart calf recruitment.

It didn't hurt that Kentucky's only real predator was a scattering of black bears, with winters so mild that come January, elk relocated from iceboxes like North Dakota must have thought they'd crossed the Pearly Gates.

"It was kind of the perfect storm to fuel herd growth," says Nathan Gregory, Kentucky Department of Fish and Wildlife Resources (KDFWR) Northeast Wildlife Region coordinator. He works hand-in-glove on habitat issues with KDFWR's bear and elk program coordinator John Hast.

"About the time we brought in elk, we were also working with the mines to get a better seed mix on the ground during remediation," says Hast. "Elk would just keep moving to newly seeded mines as they shut down. Without a doubt, that really jump-started our elk herd."



Until 25 years ago, no wild elk herd had roamed the southeastern U.S. since the Civil War. Today, roughly 14,000 elk roam 7.3 million acres of what's now known as the Coalfield Elk Zone, spanning Kentucky, Tennessee, Virginia, and West Virginia. What could have been a wildlife wasteland was transformed into a wildlife Shangri La. Will it last?

Kentucky wasted no time launching its first hunting season. By October 2001, the first bull fell to a 20-yard shot from the muzzleloader of a hunter in Perry County. The elk still wore the No. 147 ear tag placed on it in a Utah corral four years earlier. In 2006, a Kentucky bull broke into the Boone and Crockett records, scoring 361-4/8 points. That was followed a year later by a 371 typical. In all, nine Bluegrass State bulls have made the B&C records, including a monster 416-5/8-point pick up entered in 2016.

By 2009, Kentucky's herd had skyrocketed to more than 11,000 elk, with 1,000 hunting tags issued to both resident and non-resident hunters. Today, the state boasts more than 13,000 elk. Unfortunately, the heyday of these elk restorations may have drawn to a close. Fears of spreading chronic wasting disease (CWD) have nixed efforts to move cervids across state lines. Strict quarantine and testing rules helped ensure that wasn't an issue for any of these past reintroductions using Kentucky elk, and to date, no CWD-positive animals have been found within the southeastern elk herds.

OTHER STATES JOIN THE PARTY

Kentucky was hardly the first Eastern state to have elk on former coal mines. On the Allegheny Plateau in Pennsylvania, hunters take to former strip mines—turned state game land—to chase elk.

Elk in Tennessee also prosper on former coal mines of the Cumberland Wildlife Management Area (WMA), part of which was previously known as the Royal Blue WMA, named after a variety of coal mined in the area. The Cumberland WMA has grown to nearly 200,000 acres, a massive block of public land that's still growing. Just north over the Kentucky border, the Nature Conservancy is working with RMEF, KDFWR, and other conservation groups to bring nearly 50,000 acres into public ownership.

"That area holds some of our best elk hunting," says Hast. "But truly, all these big coal properties where we've got access agreements are phenomenal. I go to turkey hunt on these grasslands, and chase quail on them as well. If you'd have told me back when I was a kid that I'd be able to drive over and kill quail in East Kentucky, I'd have bet $100 against it."

Kentucky's sheer abundance of elk has allowed state wildlife managers to donate them to other states, acting as Yellowstone once did to fuel restoration efforts nationwide. Kentucky-sourced elk now roam reclaimed coal lands in Virginia and West Virginia and wildlands further to the west in Missouri and Wisconsin.

BOOM AND BUST?

At the peak of the mining boom between 2006 and 2015, Kentucky had 600,000 to 700,000 acres of grassland with great forage scattered across the state's 4.1 million elk restoration zone.

It didn't last.

KENTUCKY STATE RECORD
Non-Typical American Elk
Score: 416-5/8
Location: Martin Co., KY
Date: 2016
Hunter: Picked Up
Owner: Lisa A. Parsley

"That was during the peak of coal mining," says Hast. "Things started ramping down in 2014, and now have crawled to a complete and utter standstill" as struggling coal companies shuttered their operations. Hast says recent aerial imagery of the region shows that as mining retreated, so have the grasslands, which now barely cover 250,000 acres—less than half the area they did a decade ago.

That's because forests have grown in, but so have invasive plants that are aggressively diminishing tens of thousands of acres.

"Autumn olive is the main shrub species that we're fighting, as well as an herbaceous species known as Sericea Lespedeza," Hast says. "Birds will eat the autumn olive berries even though they don't offer a lot of nutritional value. Then you've got the things flying around essentially carpet-bombing the landscape with seeds. That's made this shrub incredibly prolific."

These invaders are a growing problem across the Coalfield Elk Zone, but habitat managers are fighting back on multiple fronts. Hast occasionally trades his elk and bear program coordinator cap for a hard hat to serve as burn boss on prescribed burn operations that stimulate the regrowth of grasses while simultaneously beating back brush encroachment.

"Prescribed fire is one of our best tools, and luckily also one of our cheapest. That doesn't mean it's inexpensive, costing about $53 an acre. But it's effective."

He says KDFWR is now burning 3,000 acres a year on average, with the aim of rotating the flames through key habitat areas every five years or so. Last year, they added herbicide applications to their arsenal and sprayed just under 2,000 acres of public land.

In addition to using fire and herbicide, KDFWR's Nathan Gregory is melding commercial timber harvest and non-commercial forest thinning to improve habitat for elk and other wildlife. Forests cover as much as 85 percent of the Coalfield Elk Zone, but wildlife need variety, so creating a range of tree age classes benefits everything from whitetails to elk to ruffed grouse.

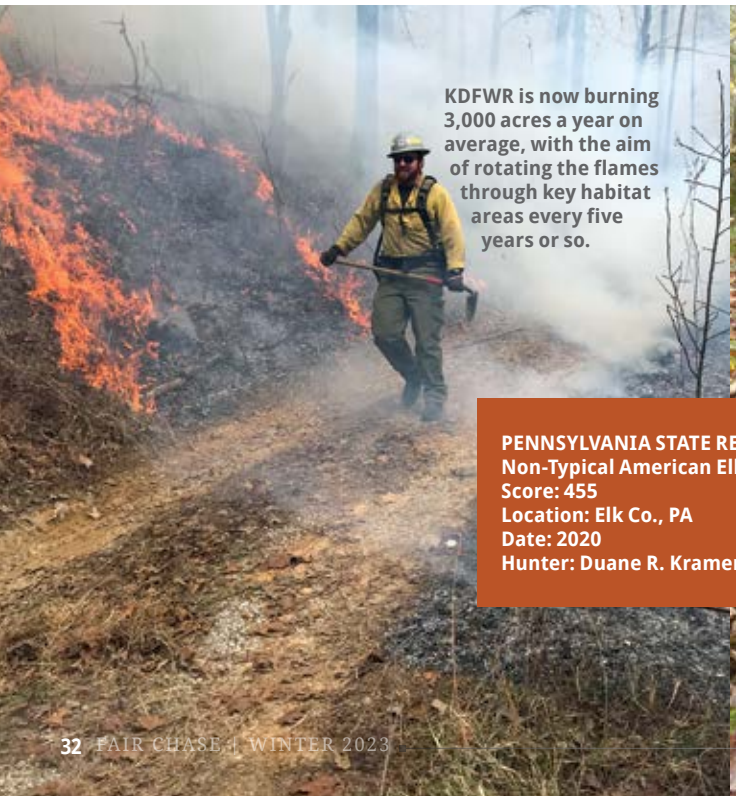
"We had all the open habitat an elk could want back when the coal mines were going full tilt," Gregory says. "But times have changed in a major way, and now it's our job to try to maintain or even get back some of that really good forage that's rapidly going away."

KENTUCKY STATE RECORD
Typical American Elk
Score: 392-3/8
Location: Pike Co., KY
Date: 2021
Hunter: R. Todd Ayers

LANDS OF OPPORTUNITY

A perennial challenge of elk hunting in Kentucky is finding access due to limited public lands. But Hast says that the situation has improved with incentive tags. For every 5,000 acres that a private landowner enrolls in the program, they receive a fully transferable either-sex elk tag. As a result, more than 300,000 acres of private land have been opened to public access.

The land owned by coal companies is a substantial asset. When those companies shut down or sell, hunting access goes with it. This means that access to that land depends on the new owner, which is why states in the Coalfield Elk Zone are now working with coal companies and non-profit conservation groups to broker either outright purchases of land or permanent access agreements. Considering the coffers of the Lands and Water Conservation Fund are now



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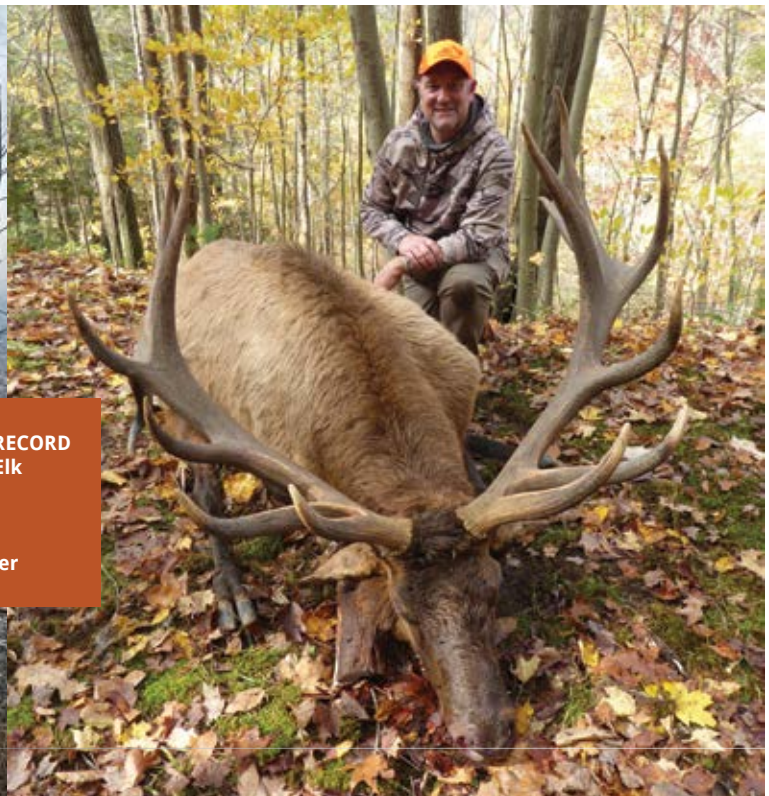

PENNSYLVANIA STATE RECORD
Non-Typical American Elk
Score: 455
Location: Elk Co., PA
Date: 2020
Hunter: Duane R. Kramer

brimming thanks to the signing of the Great American Outdoors Act, you've got a recipe for some incredible leaps in hunting public access and conserved habitat.

That's especially good news for hunters at a time when bulls just seem to keep getting bigger across the coalfield region. Virginia, now home to more than 250 elk, held its first season in fall 2022. Six hunters went after bulls, but a 15-year-old youth hunter shot the biggest, an 8x9 bull that later scored 413-7/8-points and bent the scales at 852 pounds.

Yet it may be no coincidence that the Eastern state with the greatest number of elk entered in the records book is also the place where they've been present the longest—Pennsylvania. Of the 35 bulls the state now has listed in the record book, a dozen scored more than 400 inches, with four over 440, including the current state record, a 455-inch bruiser killed in 2020 by hunter Duane R. Kramer.

Back in Kentucky, a bull killed in 2021 by hunter R. Todd Ayers scored 392-3/8. Both Hast and Gregory agree that elk have become far better educated on how to avoid hunters over the past two decades in the state. Hunters with experience chasing elk out West say it's similar, if not just as challenging.

"It always surprises me every year where the big bulls come from," Hast says. "It's not necessarily the same places and doesn't really correlate with any specific release site or state of origin. It's just people putting in the hard work to actually find them." ■

VIRGINIA STATE RECORD
Non-Typical American Elk
Score: 413-7/8
Location: Buchanan Co., VA
Date: 2022
Hunter: Austin Prieskorn

Read Austin's story online