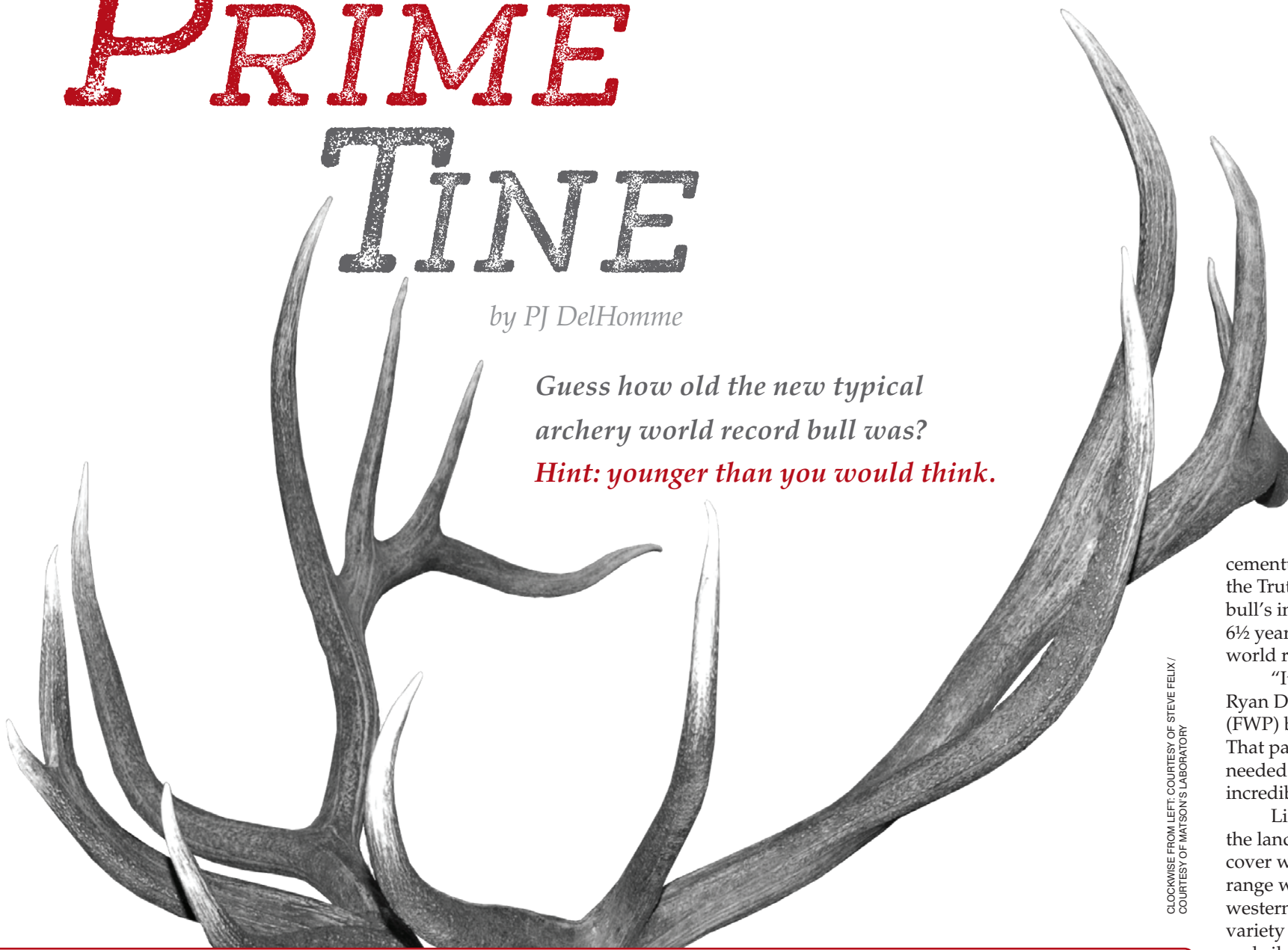


PRIME TINE

by PJ DelHomme

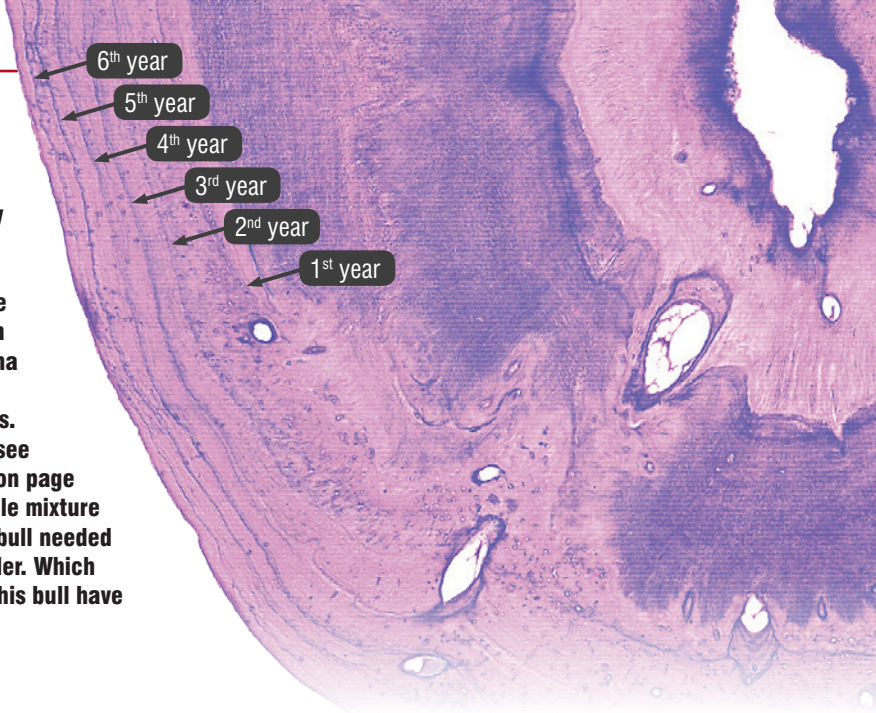
Guess how old the new typical archery world record bull was?

Hint: younger than you would think.



CLOCKWISE FROM LEFT: COURTESY OF STEVE FELIX / COURTESY OF MATSON'S LABORATORY

MIRACLE GROW: Most bulls don't produce their largest antlers until they're at least 7½ years old, many not until they reach double figures. Yet cementum analysis of the cross-section of an incisor from the bull bowhunter Steve Felix killed on public land in southeastern Montana in 2016 shows it managed to grow 430 inches of bone in just 6½ years. (For more on the aging technique, see "Want the Truth? Slice the Tooth" on page 56.) Good genetics and an incredible mixture of habitat provided everything the bull needed to grow a monster rack in short order. Which begs the question: How big might this bull have been at 9½?



Now take the new typical archery world record Steve Felix killed in southeast Montana in 2016. Using the gold standard of cementum analysis, Matson's Laboratory (see "Want the Truth? Slice the Tooth" on page 56) scrutinized the bull's incisor. The results were conclusive. It was only 6½ years old. So, what's it take to grow a 430-inch world record in record time?

"It's phenomenal elk country out here," says Ryan DeVore, a Montana Fish, Wildlife and Parks (FWP) biologist for Region 7 in southeastern Montana. That particular part of Montana has everything needed to grow healthy elk, and it all starts with incredible habitat.

Like a pair of jeans left in the dryer overnight, the landscape is wrinkled. The folds offer sufficient cover with pockets of ponderosa pine alongside open range with plenty of forage, including grasses such as western wheatgrass, Idaho fescue and blue grama, a variety of forbs, and shrubs like chokecherries, sumac, and silver and Wyoming big Sagebrush. And of course there's the tiramisu of an elk's diet—alfalfa.

In the past 15 years, much of that forage has been rejuvenated thanks to fires, both prescribed and natural. Fire can be bittersweet, though, especially when weeds such as cheatgrass move in. Even so, all those nutrients released by flames keep elk fat and happy throughout the entire year.

And these elk have no need to migrate. Unlike the western half of Montana, this area doesn't see 10 feet of snow covering up all that food. "It's year-round habitat," says DeVore.

While there are mountain lions, black bears and coyotes on the landscape, predators don't seem to have much of an impact on calf/cow ratios, which average 45 to 55 calves for every 100 cows. In western

Montana, the average is 25 to 30:100. Post-season bull-to-cow ratios in the area are high too, averaging around 40 to 45 bulls to every 100 cows. A ratio of 12:100 is more typical in western Montana.

Prior to European settlement, elk were common in the area, but they were extirpated by the late 1800s. Roughly 20 years ago, elk likely fanned out from South Dakota's Black Hills and Wyoming's Bighorn Mountains and recolonized their old haunts in southeast Montana. With an estimated 3,500 elk in the southern half of the region, DeVore says the landscape could handle more elk, but there's always a balancing act with the social carrying capacity. Elk tend to find the alfalfa and the hay bales on nearby farms and ranches. DeVore and fellow FWP managers there have responded by offering liberal cow harvest opportunity. He says 63 percent of the elk country here is made of up private land, and there is a fair amount of hunting on the ranches, so harboring is not a widespread issue.

Predators of the two-legged variety are easier to manage through limited tags: rifle either-sex permits are currently limited to 225 in the area. Archery, while less limited, will likely be tougher to draw in the future thanks in part to Felix's bull making its rounds on the internet and in magazines like this one. Even if a hunter draws a tag, this is no slam dunk.

"Some folks think they're coming here to kill a giant, but it's still hunting, and it's going to be tough," says DeVore, a hunter himself. Public land boasts high road densities, and elk have learned to equate that with danger. "It boils down to guys getting off the road," he adds. "The hard part to hunting these elk is locating them on such a large scale. You look everywhere and say, 'Wow, this is an elk smorgasbord.' It all looks good. Where do you start?"

Back in the early 1980s, wildlife biologist Gary Wolfe managed the 500,000-acre Vermejo Park Ranch in New Mexico. The ranch featured superb elk habitat and limited, highly prized hunting opportunity. This combination gave him the chance to evaluate an unusually high percentage of mature bulls. Wolfe looked at nearly 500 bulls to correlate the relationship between age and antler growth. He found that most bulls reached maximum antler growth between the ages of 7½ and 10½, weighted toward the upper end of that range. This age range was later affirmed by extensive research the Boone and Crockett Club conducted on record-book bulls in 1998.

