

## SECRET OF THE RED BUFFALO

Lo, how they thunder hungrily across the prairie—the red buffalo—with wild hearts hammering flint on steel, chests pumping like massive bellows, throats hot as a forge and tongues of flame—setting the prairie on fire—and the hills flare and smolder in their wake.

After the ravenous herd has passed by, the prairie is dressed for winter's funeral—all in black from hat to shoes—and wears this stark, mournful apparel for a respectable amount of time, until one morning all sobriety is thrown to the wind and green becomes the color of the day.

It is an ancient secret that after the red buffalo had passed and the green grass had returned, so too would the other buffalo soon be back, the shaggy brown beasts that once roamed the prairies in stunning numbers and provided precious meat for the hungry, bone for tools, hide and fur for clothing and shelter.

This footloose, free-spirited native species has now been replaced by cattle confined within miles and miles of fence.

The red buffalo still return each year, although the randomness and creative chaos of earlier days has been vastly curtailed. Still, the secret has passed down through the centuries, that fire is a friend of the grass.

This was almost certainly discovered, as so many things are, by close observation of nature's nature. Random lightning strikes or untended cooking fires set bits and pieces of prairie aflame, and fire, although feared and respected by early inhabitants, worked like magic—better than drums and dances and prayers—to bring the bison. The spirit of innovation eventually whispered a suggestion

in someone's ear, that there was no need to wait for lightning to strike. The keeper of the tribe's big medicine—playing the role of lightning—could initiate the sacred ceremony of the red buffalo.



Over time we have lost a key part of the secret of the red buffalo.

Funny how it creeps in and corrupts things, the line of thinking that *if a little is good, more ought to be better*. This is the very impulse I credit with the

dull similarity of freeways, suburban subdivisions and commercial strips.

The penchant for uniformity and ever-larger scales of conquest has taken the beneficial magic out of fire here in the Flint Hills, at least the sanctity of its original use. Certainly prairie fire remains an inspiration for art and music, festivals and tours, but the fire here lacks heart; it has become a science of conflagration. The central question, at least in our county, has become *how do we burn every scrap of grass between the end of March and the middle of April?*

In the old days, the red buffalo might come in any month of the year. They might devour a patch here and an entire valley elsewhere. In short, the pattern was random, chaotic, unpredictable, and it left the gift of diversity in its path. The other buffalo, the grazers who favored the succulent green shoots that sprang up in the wake of the fire, further enhanced this diversity by their preferential grazing patterns: eat the choicest greens, leave the rest and move on. The trampling of their hooves and their offerings of recycled grass all played a role in prairie health.

Depending on what time of year the red buffalo came, they promoted the growth of some plants and thwarted others, and because

the timing and frequency of fire was seasonally random, the vegetational mosaic was constantly shifting. As the plant communities changed, the grazers, browsers, insects, reptiles, small mammals and birds also shifted in response. The environment was dynamic—constantly in flux, dazzlingly variegated.

The perennial plants of the prairie, especially the native grasses, store many of their resources below ground and are relatively fire-tolerant, while annual grasses and broadleaf plants are more likely to be fatally damaged by fire. After spring fires, the ash-blackened earth becomes a solar attractor that warms the soil and promotes the emergence of new growth. Long periods without fire favor the growth of invasive woody species like sumac, eastern red cedar and locust. Too-frequent burning selects for a markedly scaled-down variety of fire-hardy plant species and alters soil chemistry and permeability.

Balance in natural systems is mysterious, self-regulating and easy to disturb with the least amount of fiddling.

An understanding of the beneficial alliance between fire, grass and grazers has passed down through generations, but our grasp has become increasingly shallow and is no longer informed by the deeper affiliation with nature that provides an appreciation of the subtle and complex interrelationships among a host of gloriously diverse members in an amazing system that worked like a dream for ten thousand years.

These days the red buffalo are neatly dispensed along the Jeffersonian grid, which is the beginning of a misapprehension of practical magic and natural systems. Land-forms do not typically adhere to straight lines—parallel and perpendicular—but we have insisted on translating imaginary lines into roads and barbed-wire fences that are

intended to define and enforce possession. Along these lines rides the fire-maker, loosing the red buffalo unceremoniously through a pipe attached to an all-terrain vehicle. The driver can't stop to talk for even a moment;



without constant motion the gas-fed fire stick becomes a kamikaze accessory.

The rule of thumb is that you need a good breeze of at least five miles an hour to carry a fire, and winds of less than fifteen to avoid a stampede you can't control. You're also supposed to call the county sheriff and fire department to let them know when and where you're burning, but I'm not sure those calls get made all that often. Burning at night is illegal, another regulation that is regularly ignored. Thoughtful neighbors call one another when they're burning adjacent pastures, and the truly prudent ask for help and have a spray rig near at hand to corral the flames when they get unruly. It's considered bad manners to burn off someone else's land without permission, but it happens, sometimes through inattention, occasionally in vengefulness, some days just because, well, a person gets carried away.

Fire is a heady force and there's a streak of pyromania in almost all of us. Laying a grass fire is as near to being on the sending end of an act of God as most ranchers or pasture managers are likely to ever get. Folks get itchy in the spring, and fire is the salve. Sometimes the red buffalo call and someone will answer, bent single-mindedly on spreading fire as if in a trance, good judgment temporarily suspended.

This happened yesterday and the red buffalo are still advancing across other people's property lines this morning, including ours. Wind gusts were up to twenty-seven miles an

hour during the day and they howled on through the night. Flames leapt and roared and jumped across roads and creeks. Last year's bumper crop of native grass—tall and tantalizing—gave the red buffalo plenty upon which to feed.

I went out driving after dark last night and was lured by the advancing lines of fire, mesmerized by the hungry crackle of flame as it voraciously devoured the dry vegetation, captivated by the whirling vortices of ash and that poignant scent, the primitive odor that has the power to tap into the deepest reaches of almost anyone's brain and pull up a vivid sense memory of fires long past.

This morning I took another tour and saw that the red buffalo were not yet satiated; yesterday's fires are still alive and well and have been left to their own devices.

The blackened hills have a profound visual impact in the light of day. I had to get out a township map to see the deeper impact. I colored in the fire-scorched sections with a hot pink highlighter and saw that close to five thousand contiguous acres have burned just in the last forty-eight hours, and what this means to me is that very soon there will be hundreds of square miles in which ground-nesting birds like prairie chicken, meadowlark, Henslow's sparrow and killdeer will be hard-pressed to find a clump of grass for cover from predators, let alone a safe place to nest. If a clutch has already been laid, it is by now a singed basket of hard-boiled eggs, a handful of promises made that will not be kept.

Capitalizing on the forced eviction of smaller creatures, low-flying hawks follow the line of fire—an eerie sight—hunting birds, mice and rabbits. I don't begrudge anyone their next meal, but this seems unsporting, like using a

spotlight to hunt deer. A good bit of advice if you're ever caught in a prairie fire is something all these creatures, even cows, know by instinct: *go to the black*.

The fires this weekend are nothing, really, to what will take place during the next few weeks. Very little grass will be spared, and this is where current practice departs radically from ancient wisdom.

Everyone has an agenda, and the predominant one out here is to manage the land for cattle and the cattle for profit. The proof for the benefits of wholesale annual burning is in the weight gains at the end of the grazing season.

The *more is better* way of thinking really got the upper hand about twenty-five years ago when range and animal scientists from our land grant university advocated for both annual spring burning and a new system called

Intensive-Early Stocking (IES or double-stocking), which basically doubled the number of yearlings recommended per acre, but took them off the grass in half the normal time.

Theoretically this made some sense, and the gain per acre

was better than that for the traditional full-season stocking. Without apparently considering the long-term impact on the prairie plants that were being put under new and intense demands to produce these gains, Flint Hills folks began embracing the practice until it had carved out its place in the local consciousness to a depth that qualified it as a tradition, which more or less exempted it from further questioning.

Most anyone is game to throw a pebble in the pond, but who has the patience and foresight to watch how wide the ripple gets or what else it touches over the next twenty-five years and beyond?



Managing for wildlife is quite another agenda, and from this perspective it's not hard to see why the annual burning and double-stocking are a terrible idea. First you burn the grass to the ground and then put cattle on it as early as ten days later. Cattle love the tender green stuff that's popping up, of course, so they keep it grubbed down to within an inch of its life from early May to the middle of July. Advocates of this practice say *hey, the grass has the rest of the growing season to recover*, which is true, but what's also true is that all of the ground-nesting birds and other small mammals have been left without nesting and escape cover during the bulk of their breeding season.

A compelling demonstration of this impact is



our declining Greater Prairie-Chicken population. In the remaining home range of this signature prairie species, which

includes parts of Oklahoma, Kansas, Nebraska and South Dakota, only the Flint Hills region—from northernmost Oklahoma north to northern Kansas—employs annual spring burning and IES. The steepest decline of prairie chickens is in this region, and it began at exactly the same time the new range management regimes became popular. In the last twenty years, Greater Prairie-Chickens have declined by sixty-five percent in the Flint Hills. By contrast, the prairie chicken populations in Nebraska and South Dakota for the same period were stable or on the increase. Incidentally, Kansas does still have a prairie chicken hunting season, but the hunters are not the problem. In fact, their luck in the field is also reflective of the decline: 109,000 birds were taken in 1982 and only 12,000 in 1998-99.

Yet another agenda is to manage for the health and vigor of the flora themselves, which includes not only the grasses, but also



the other native prairie plants, the wildflowers and herbs. You won't find many ranches

in the Flint Hills where this is the principal motivation, but there are some of us who treasure the palette of indigenous vegetation for its natural beauty and the role it plays in the prairie bioregion. Here again, annual burning and double-stocking prove problematic. Right from the outset, in the first paper published in 1978, researchers found that this system had a negative impact on the growth and reproduction of plants other than grasses, but since grass was king, what the heck?

Here's the problem: uniformity begets uniformity, and while this may be appropriate to a production line on which a particular model of automobile is being assembled, it's a terrible way to treat a prairie if you treasure it for its untamed uniqueness and variety. One day I expect our general lack of respect for the value of diversity to come back and bite us soundly in the backside.

I could go on. There are any number of agendas: you can manage for soil, for water, for animals other than cattle, or for preservation of a particular species. You can manage for profit, for beauty, and maybe even for truth. My grand point, I suppose, is that every agenda breeds its own myopia if it is singular in focus.

I like to think that our Homestead Range Renewal Initiative takes a decent stab at managing for integrity—for the health and wholeness of the natural system. I suggested to Jane that perhaps we are managing for chaos, and she pointed out that management and chaos in the same phrase are oxymoronic. I still think there's a way around this. *Maybe*, I said, *what we are trying to do is to foster a*

*chaos-friendly environment.* And Jane, after a bit of thought, said, *maybe the whole point is to learn to let go and not manage at all, to overcome our fear of randomness.*

The conditions this coming weekend look really good for burning, and if that turns out to be the case, our unburned land will soon stick out like a sore thumb and we'll have to stand against the line of red buffalo and protect our grass from the flames. Our experimental program calls for burning only one-third of each pasture a year, and while this doesn't make sense to anyone but us out here, I expect it will spark our neighbors' curiosity, if only because they want to be watching when we fall flat on our faces with these damn environmentalist ideas.

This patch burning method is by no means random, but it does take a big step in the direction of diversity. It also requires temperance. Lord knows and my friends do too, there's nothing I love so much as playing with fire. I'd just as soon be out there with the rest of them, burning the pastures from edge to edge, but it just doesn't make sense. Another kind of restraint we use is to rely on good old-fashioned wooden matches instead of gas-fed fire sticks to start our blazes. The angle of the throw and the whim of the wind contribute to the randomness of what gets burned.



We also have plans to summon the red buffalo to smaller areas in late summer and even winter, mimicking the seasonal patterns of lightning strikes and untended camp fires. This will really make the neighbors sweat, when they see smoke on the grasslands in the summer, because it is so far outside the scope of their expectations.

Although we are following a trail blazed by someone else—Dr. Sam Fuhlendorf at Oklahoma State University—we are in a small scouting party that hopes to come back with a plan that will sustain the prairie while still allowing profitability in cattle, a paradigm that we have high hopes our neighbors will eventually embrace. We may appear to be

going forward into the future, but in truth we are going deep into the past, back to the uncorrupted secret of how the red buffalo, the grazers, the grass and all the members of the prairie system lived in a balance of benefaction.

In the meantime, as I watch the prairie quilt blacken patch by patch, I take pride and comfort in the knowledge that we are providing close to two thousand acres of protective cover in which the displaced citizens of the burnt vicinity can hide from the red buffalo and the predators, do their mating dances, make their nests and raise up their young and their magnificent, chaotic chorus of voices.