## Prairie Returns to Lethbridge

BY LORNE FITCH, P. BIOL

They loaded up our lawn in a truck and hauled it away; we couldn't have been happier. No more watering, fertilizing, fighting Dandelions, mowing and pimping up a rectangle of exotic Kentucky Bluegrass that gave my wife and me no joy or pleasure.

I suspect native grasses have been absent from our Lethbridge residential lot, north of the hospital, for over a hundred years. Under a neighborhood canopy of elms, spruce, birch and lilacs and other non-prairie flora it's hard to conjure up the scene that persisted here for thousands of years – a sun-scorched, wind blasted, droughty grassland on an undulating plain above the Oldman River valley. But that is what it once was. We are slowly coming to respect and pay homage to native prairie by reestablishing in our front yard plants that naturally belong here, or at least are tolerant of drought.

Of grasses says Tony Rees, an Alberta historian, they are "the plains perfect tenants". Trees cannot compete with grass and they are here because we do not like to live without them. They are generally something from a more well-watered land.

Trees, wrote one pioneer, showed that "real homes" could be built on even the

"bald-headed" prairie. They were a shield against prairie space, that frightful immensity of seeming nothingness. To plant a tree was to confer order and control, to make an adjustment from the open grassland. On early farms, PFRA, the then reclamation arm of the federal department of Agriculture, felt tree and shrub planting was necessary to ensure people stuck to their homesteads. Anything, it was thought, to make the place more attractive and appealing.

With this and all of our clever engineering and ingenuity, most of the prairie grasslands were long ago transformed and molded into something else to meet our economic strivings and our misplaced sense of how the landscape should appear. Perhaps it was a function of heritage: those of us not born to the prairie or whose parents, grandparents or earlier ancestors came from and wanted to replicate the green, lush, shaded landscape of a forgotten homeland. Mostly those landscapes exist only in our dreams.

It was recognized very early in Alberta's history that settling the prairies would be challenging. An 1890 editorial in the *Medicine Hat News* observed, "It would be criminal to attract people here." But the great vacant land did beckon, perhaps sparked by the colonization dreams (and lies) of the federal government and the railroad. For the last century and a bit, we have been engaged in an unceasing endeavor to change the grassland, to make it into something else rather than to learn to appreciate its inherent qualities.

Native prairie grassland represents a treasure hidden right under our feet. Grasslands are marvelously adapted given their 10,000 year evolution under arid conditions. Nothing else rivals their drought tolerance, nutrient recycling, resilience, moisture conservation and ability to support wildlife. Molded in a crucible of change for at least 10,000 years in this place, and longer given their pre-glacial history of distribution, prairie grasses are stickers and have much to teach us about adapting to our changing climate. Though their time in southern Alberta isn't deep time, prairie grasslands are at least a hundred times



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**BLUE GRAMA TURF: "...AVOID THE GOOFY TASK OF** MOWING LAWN." CHERYL BRADLEY



BLUE GRAMA: TOUGHNESS, YET LOOKS SOFT. CHERYL BRADLEY

older than the mere century of most of our recent human time.

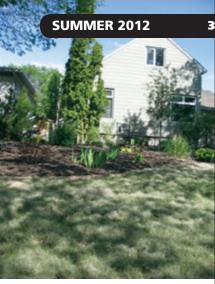
That's a bit of background for our curious endeavor to exchange our Kentucky Bluegrass lawn for one of native Blue Grama grass and other similarly drought adapted species. What might need some more explanation is that our motivation was not only to recapture some of the past prairie history of Lethbridge but also to avoid the goofy task of mowing lawn.

Lawn care is an activity that perpetuates an alien landscape in the aridity of southern Alberta. It is wasteful of water, which is poured on foreign grass species that never evolved under dry conditions. The care of it creates greenhouse emissions, especially from most gasoline-powered lawnmowers. The product, grass clippings, has no commercial value and worse yet is routinely discarded to add to landfills. To keep this turf green, pristine and matching the contemporary neighborhood standard requires, according to the lawn care experts, routine applications of fertilizer, herbicides and pesticides. The excess chemicals and water run off and taint our rivers and possibly ground water supplies. Ironically, after all this cost, effort and impact we spend less time using this space than any other part of our homes.

Our tyranny of greenery is an artifact of different geography and economic status. The moist, damp climate of maritime Western Europe, especially Britain, made lawns possible to grow and manage. Lawns began as pastures, common areas surrounding villages for grazing sheep and cattle. They evolved into a symbol of status for the aristocracy and the gentry. Only the rich could afford the labor cost to manage a lawn before mowing machines became available. What these expansive lawns and parks created was an image, carried with immigrants to North America, which became a symbol of the middle class dream - to own a home surrounded by green lawn.

With images of sweeping green lawns planted firmly in the imagination, it has become part of our civic duty to maintain this anomaly in the arid environment of southern Alberta. Perhaps it's an obsession, so prevalent and pervasive we can't imagine anything else. It is a distraction, an artifice to trick us into thinking we live somewhere else but a place with scant rainfall.

The front yard my wife and I have created attracts attention. People



EARLY PIONEERS CALLED IT PRAIRIE WOOL. CHERYL BRADLEY

stop and look at it, almost as if it is exotic, which now it is. Native grasslands have been reduced in scale, are invaded by non-native species and are removed from most people's consciousness to the point that what was once native is now the unusual.

But that's not to suggest the Blue Grama grass lawn isn't striking, in its own way. It grows close to the earth, a desirable trait for a grass in a windy, sun-drenched and dry place. What it lacks in height it makes up for in curls; the blades roll, kink, twist and coil. Early pioneers called it prairie wool although the term could fit any number of low growing native grasses that formed a dense mat over prairie soils. When Blue Grama goes to seed the head resembles a small toothbrush. When the seed heads wave in the wind they look like hundreds of tiny toothbrushes busily scrubbing the air.

Prairie grasses, over time (and they've had a lot of it), have evolved mechanisms to strengthen themselves, to provide a plant version of a spine probably in response to wind. They incorporate, into their cellular structure, minute quantities of

HOME COMPANION. CHERYL BRADLEY

silica as a stiffening agent. It means that grazing animals don't get a free lunch as eventually the tough prairie grasses grind down the teeth of those that eat them.

Despite this built-in toughness the Blue Grama looks soft. Two young women stopped to admire the lawn and commented on how soft it looked. I invited them to kick off their sandals and try it. They did and giggled at the pleasing texture and caresses on their bare feet.

Corralled by driveway and paved street, Blue Grama still manages to look wild - not tamed, a little disheveled and undomesticated. When it greens up in the spring, later than other lawns, it retains a subtle, pale shade, muted and not glaringly showy like the grabyour-eyes, deep green of Kentucky Bluegrass. In the autumn Blue Grama wisely senesces and goes dormant early, leaving behind a tan mat of wool with occasional seed heads poking skyward.

I've given away our non-motorized push mower. It made a pleasant clicking noise as the spiral blade

cycled around, and it was good for a little exercise every week or so through the summer. But like tossing one's crutches aside at Lourdes, it's gone. The neighbors are probably curious how we are going to deal with the lawn. No one has asked, but if they do I'll remind them that in the natural world prairie grasslands were subject to either fire or grazing. It's their choice – we can either torch the lawn periodically or get a buffalo in to graze it down.

A tiny patch of native Blue Grama grass doesn't seem like much of a statement against a backdrop of a highly artificial, much manipulated city landscape. But, I suppose, the first footprint of European immigrants to the grasslands of southern Alberta wasn't initially very significant either. To recognize where we live, with the constraints of the landscape, is a faltering step to make. Ours is a tiny step of reversal but one we hope others try. Our prairie urban garden is a grassland home companion.



## PRAIRIE URBAN GARDEN:

Growing Beautiful Gardens in a Semi-Arid Environment

"Prairie Urban Garden" is an initiative of the Oldman Watershed Council's Urban Team. Its goal is to demonstrate the beauty and benefits of having a xeriscaped garden in southern Alberta.

Xeriscaped yards fit in with the dry prairie environment that we depend upon and allow homeowners to enjoy a beautiful landscape at home.

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