

# Argyle man cultivates native plants

BY GORD LEATHERS

There's one crop in a small farm near Argyle that few know about but should be of great interest to landscape architects, scientist and ranchers.

John Morgan is starting the only commercial enterprise he knows of in Canada to perpetuate the natural inhabitants of the prairie.

As he says, it may be the last chance we get to use the natural prairie to our benefit. Once a species is lost, it is gone forever.

"We've got 150 acres," Morgan said. We're specializing in native prairie plants. That's why we bought the place.

The intent is to start a prairie nursery for seed stock.

Morgan is well qualified for this kind of work. He earned a Master's degree from the National Resource Institute in Winnipeg on land owner attitudes toward wetlands so he worked with farmers during the course of his studies.

Following that he worked for the Department at Natural Resources in the Habitat Enhanced Land Use Program (H.E.L.P.). He helped convince land owners to spare some of the poorer land from cultivation and rejuvenate the naturally occurring prairie species.

In his spare time he sat on the board of directors in the Manitoba Naturalists Society where he chaired the Tall Grass Prairie Preservation Committee.

It was here that he saw a need to start a program at prairie species preservation.

The idea of cultivating them appealed to him for two reasons. It could fill that need as well as offer a project that he and his wife Carol could do together while raising their family.

They have two daughters, Shawna and Heather as well as a border collie pup named Pepper.

Just what are the benefits and why should anyone be interested in Morgan's work?

A lot of calendar photographs of Canadian landscapes show breath-taking mountain vistas, Ontario churches or Maritime coastal scenes, but when the prairie is presented it is invariably grain fields, elevators and railroad tracks stretching off into the horizon.

This is most people's concept of prairie.

Real prairie is different and quite rare. According to Morgan, the remaining tall grass prairie amounts to less than 1/20th of one per cent. This means that the original plants and animals are all but gone from their former range and in imminent danger of disappearing altogether.

Morgan is interested in several aspects of the original prairie plants from their relationship with the soil to their capacity to cope with the environment in which they evolved and he feels that this can be put to work.

## Backing The Gene Stock

"One of my concerns is with wild gene stock," Morgan said citing that the wild gene pool is rapidly disappearing. "The loss to society is extreme."

Plants, like all living organisms, have a genetic program that acts as a blueprint. It determines everything about the plant from its size and shape to its resistance to disease or drought. All of the domestic plants that we know have been selectively bred for characteristics such as yield.

When the wild stock disappears so also do several of the genes that make the wild plants able to cope with the local climate, soils and pests. Any other possible uses of the wild plants are also lost forever.

Morgan pointed out that corn is a native North American



John Morgan of Argyle shows specimens of prairie grass

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plant that had been cultivated for centuries by the Indians who developed several strains. If no one ever had the idea of developing the breed and the original wild corn was ignored and then wiped out, that potential would have been lost forever.

Furthermore, with selective breeding of domestic plant stock, some of the wild genes are being bred out. These genes sometimes control characteristics that are beneficial to the plants under local conditions such as climate and pests.

There are some seed collectors that are searching all over the world for the wild predecessors of our domestic species in the hope of preserving the wild genes in case they may be put to use in agriculture.

For instance, big bluestem grass is native species that grows best when the weather is hot and dry.

Genes from the bluestem can also be transplanted into domestic wheat to make it more resistant to drought and local insect pests.

"Big bluestem is adapted to everything this part of the world can throw at it," according to Morgan and he says that the 18 per cent protein content is as good as any grass.

As a result ranchers are interested because big bluestem can be an important forage crop that is custom made for the area and available when most European forage crops are affected by hot or dry weather.

Morgan has a range of other plans for his crop of native plants. Seed production is the most promising short-term idea although there are plans for a wildflower nursery and green house for developing bedding plants that are native to the area.

"A lot of these flowers would be very attractive for landscaping purposes."

There are some people who are interested in what Morgan proposes to offer in the next few years. He already has one contract with a park development in Winnipeg.

"We've already got a contract with the Forks for next year. I think they're taking 300 live plants," Morgan said. "One of their landscape architects is keen on prairie."

In addition there are 10 or 12 people that Morgan mentioned as being interested in restoring tracts of their land to native prairie. The native plants recharge the soil and replenish the nitrogen. They have commissioned Morgan as a consultant.

It may seem strange but one of the rarest forms of wilderness left is tall grass prairie of the type the first settlers saw. Morgan sees a paradox in Canadians when this is pointed out to them.

"You'll tell people that they should be more concerned and they say there's lots of it," he said.

This is in contrast to our mid western neighbors to the south. The grain belt states have shown great concern in their portion of prairie.

"The U.S. has a big industry in native prairie grasses and restoration," Morgan pointed out. "There's one place in Missouri where they spent three years and \$70,000 to preserve .3 acres of loess prairie."