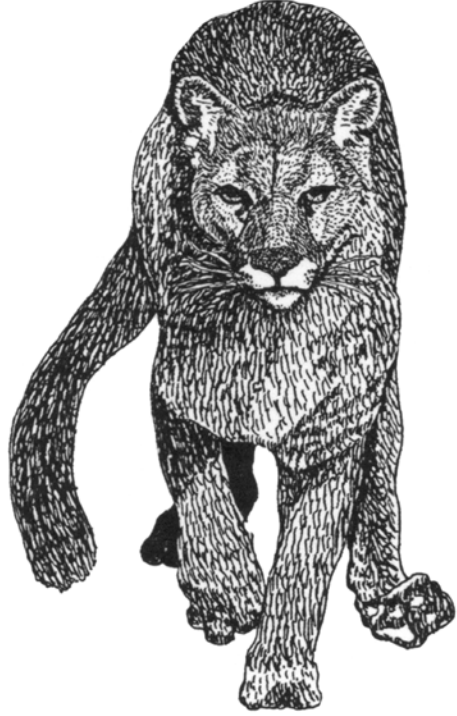


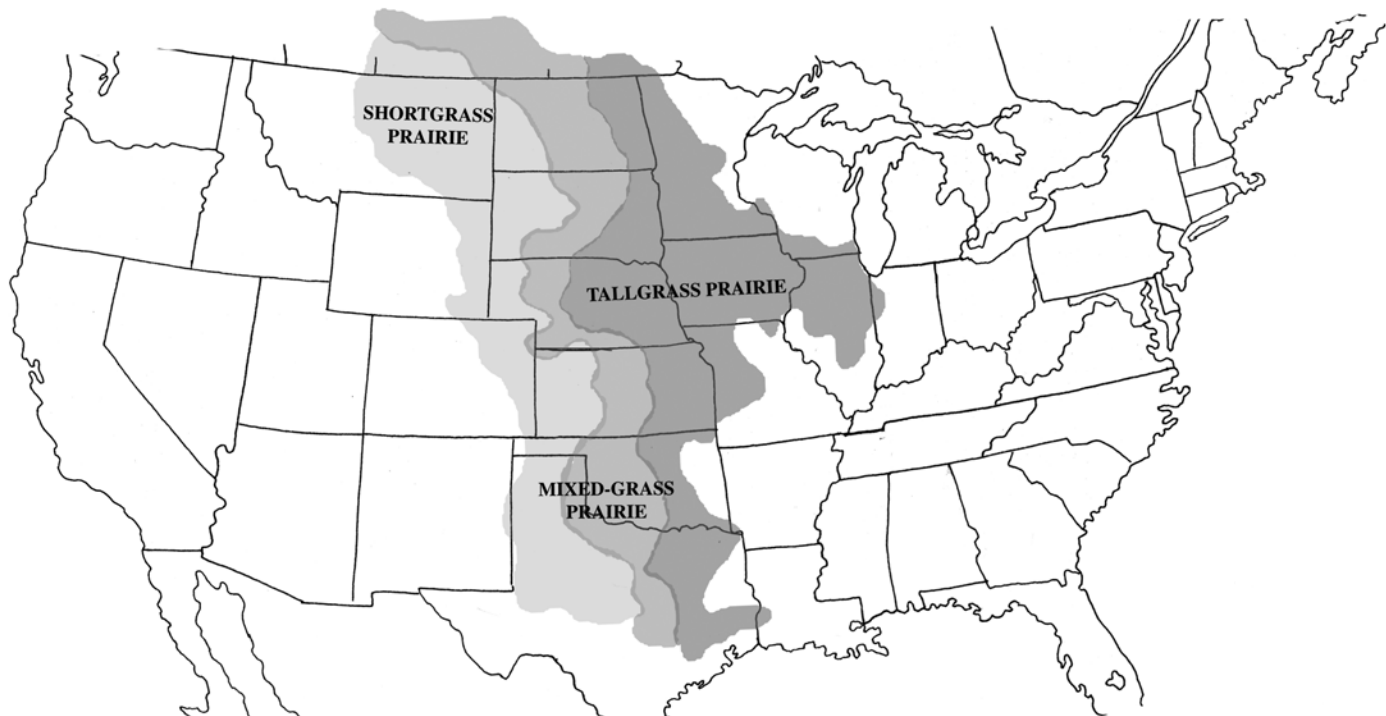
IOWA LIVING ROADWAY TRUST FUND

ROADSIDES
OF
OPPORTUNITIES

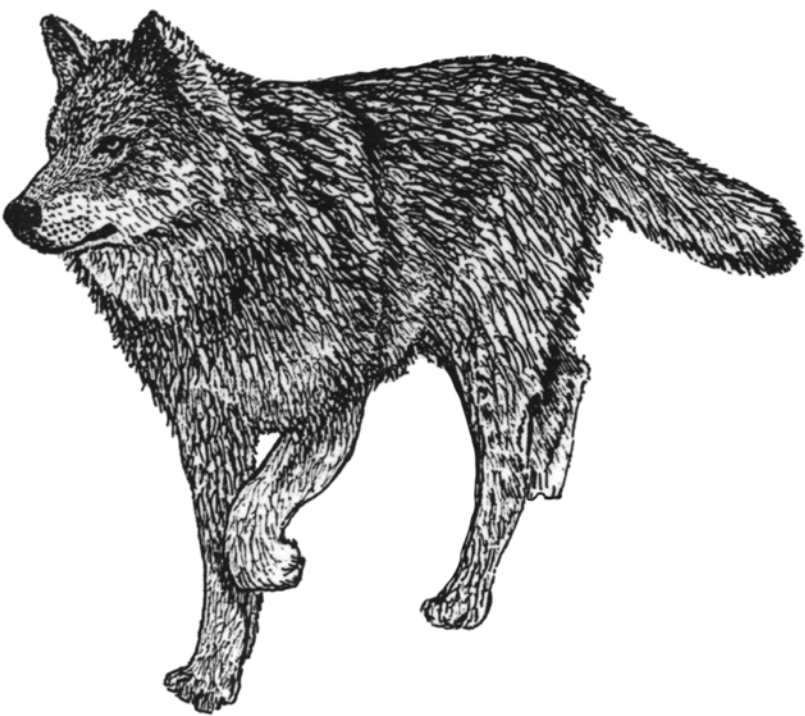
TALLGRASS PRAIRIE is the name given to the grassland ecosystem that once covered much of the upper midwest and most of Iowa for over 8000 years. When early French explorers emerged from the dense, hardwood forests of the east, they unexpectedly encountered large, grassy openings among gnarly, old, bur oaks with massive crowns. They referred to these grasslands as "pr rie". Traveling further west, the openings stretched into vast, treeless, oceans of grass and wildflowers that would take weeks to traverse on horseback. When the first settlers arrived in Iowa in the early 1800's, the prairie landscape was unchanged. Healthy stands of prairie were composed of 500 or more species of plants. Cougar, wolves, bears, elk and bison roamed the prairie. Endless flocks of waterfowl, upland gamebirds and songbirds filled the prairie skies. Along with its beauty and diverse abundance of wildlife, the early Iowa prairie offered deadly perils as well. Fierce winter storms could howl for days and raging wildfires could overcome a person on horseback at full gallop. Periodic fires allowed the deep-rooted prairie plants to flourish while invading trees and shrubs perished.



At first, settlers thought that the prairie soils were too poor to even support trees. But they soon learned that the prairie had created the deepest, blackest, richest topsoil in the world. It was no easy feat to plow through the dense root mass of the prairie sod but with the advent of the moldboard, steel plow, the pioneers began to plow with a vengeance. Within a few short decades one of the greatest grassland ecosystems in the world was converted to agricultural cropland. Along with the flora, most of the prairie fauna disappeared from Iowa as well.



With the demise of the prairie, we have lost not only a large part of our natural heritage, but some of our cultural heritage as well. Whether we know it or not, prairies made a big impact on who and what we are today, both spiritually and economically. Aldo Leopold once said, "What a thousand acres of Silphiums looked like when they tickled the bellies of the buffalo is a question never again to be answered, and perhaps not even asked." Perhaps we will never again answer that question, but with the increasing interest and appreciation for restoration and protection of prairies, many very special people are now definitely asking the question !



This map shows the approximate, original boundaries of tall, mixed and short grass prairies before settlement. Of the original 30 million acres of tallgrass prairie that once graced more than 80% of Iowa, less than .1% was spared the plow. All that remains are tiny remnants unable to support the once diverse and abundant wildlife. Large-scale restoration projects hope to bring back a taste of the past glory of the prairies.

IOWA ROADSIDES are full of opportunities. Preserving and planting historically significant, native plants in roadsides can provide: cleaner water in our streams through improved filtration, improved plant diversity that provides sustainability of roadside plant communities, educational opportunities to view and study plant communities that helped develop Iowa's rich soils, ever changing views of colors and textures with diverse plantings, opportunities for tourism and recreation through improved aesthetic beauty and wildlife habitat, connecting links to original native plant areas to preserve genetic diversity and allow beneficial insects and animals to increase, reduced mowing and chemical maintenance while reducing noxious weed problems, reduced snow drifting and winter glare along Iowa roadways, and a more interesting trip through Iowa for all who travel our roadways.

LANDSCAPING with prairie plants can be both beautiful and beneficial. After establishment, the planting requires very little maintenance and no herbicides, pesticides or fertilizers. Prairie plants tolerate drought, frost and hail, reduce erosion, mowing, and chemical use, and provide quality habitat and food for wildlife. Showy flowers bloom throughout the growing season and grasses splash a winter landscape with color. To learn more about prairies and planting prairies see the references listed after the following planting tips.

PLANNING: Choose your site. It must have from 70 to 100 percent sunlight. Determine the soil type (wet, dry, clay, sandy, etc.) and the size and shape of your planting. THINK SMALL. You can always expand your plot after you determine which plants do well on your site and after assessing your time commitment. Gentle curving lines resemble native prairies more than squares, rectangles or sharp angles.

SITE PREPARATION: On small sites, you can remove perennial weeds by hand, removing roots and rhizomes; you may begin planting immediately. On slightly larger sites, you may cover the area with black plastic for a year prior to planting. On large sites you will need larger equipment. Begin discing the area a year in advance and continue to disc periodically during the growing season exposing weed rhizomes and roots to the sun and frost.

SEEDS: Seeds or plants may be purchased from a number of local, reputable dealers. It is important to use seed that has been collected locally which more readily adapts to your area and insures the genetic resilience of local plants. You may also collect your own seed and start your own plants (see references).

SEEDING: On small sites, seeds can be broadcast by hand. Rake the seeds in and and pack firmly. Do not bury the seeds in a fluffy seed bed as you would in a garden. Prairie seeds germinate best on a firm seedbed with maximum seed to soil contact. Try to plant a minimum of 20 species of forbs and 5 species of grasses. The ratio of grass to forb seed should be between 60 to 40 and 80 to 20. The grasses will help support the forbs and more closely resemble a true prairie. Try to seed in late May to early June to take advantage of adequate rainfall.

MAINTENANCE: On small sites, weeds may be removed by hand or the area can be mowed or clipped by hand about 6 inches high to keep the faster growing weeds from shading out your seedlings. Most prairie seedlings concentrate their growth below ground the first few years. You may want to mow the second year too. In the spring of the third year, either burn your prairie plot or mow and remove the plant material. Some plants may bloom the first year but the real treat is after the third year burn. Prairie plantings require a little work, faith and patience.

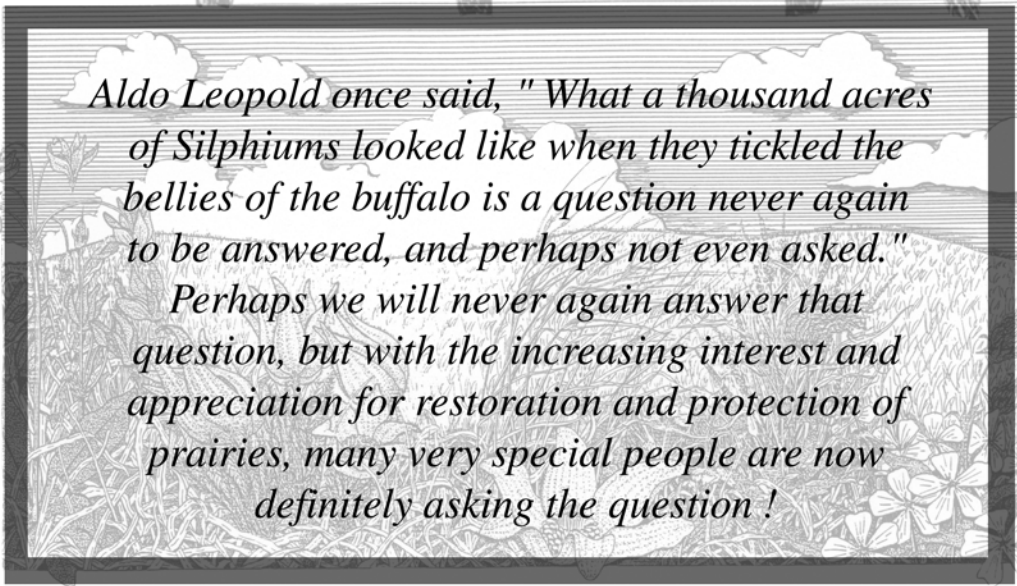
REFERENCES: *The Prairie Garden* by J. Smith, *Restoring The Tallgrass Prairie* by Shirley Shirley, *Tallgrass Prairie* by John Madson and Frank Oberle, *The Prairie World* by David Costello, *Where The Sky Began* by John Madson, *An Illustrated Guide To Iowa Prairie Plants* by Paul Christiansen and Mark M ller, *The Tallgrass Restoration Handbook For Prairies, Savannas, And Woodlands* edited by Stephen Packardand Cornelia Mutel, *Prairies, Forests And Wetlands - the Restoration of Natural Landscape Communities in Iowa* by J. Thompson



The LIVING ROADWAY TRUST FUND

Recognizing the value of native plants in roadsides, the Iowa Legislature established the Living Roadway Trust Fund (LRTF) in 1989. This annual, competitive grant program provides funding for integrated roadside vegetation management (IRVM) activities, including the preservation, establishment and maintenance of native vegetation along Iowa's roadsides. To learn more about the LRTF and the projects it funds, visit www.iowalivingroadway.com.

This poster series, illustrated by Iowa native Mark M ller, is one of many educational tools provided by the LRTF to promote public awareness of native prairie and the benefits it provides in highway rights-of-way. Iowa residents may order a complimentary set of posters at www.iowalivingroadway.com.



THE ILLUSTRATOR Mark M ller has spent a great deal of his life exploring, sketching and photographing the world from Alaska to Antarctica. He is currently a freelance artist living on a small "refuge" west of Iowa City. The LRTF is pleased to be sharing Mark's talent and enthusiasm for Iowa and it's natural heritage.