

## THE JACKSON STREET PRAIRIE

Report jointly made by the Golfview Hills Woman's Club Prairie Committee and the Ecology Committee to the Golfview Hills Park District Board, Woman's Club Board and Jackson Street residents. September, 1974

- I Explanation of what prairie is and why it is worth saving -- an excerpt from an out-of-print pamphlet prepared by Dr. Robert F. Betz, Biology Professor, North Eastern Illinois University, for the Morton Arboretum in 1965.

"Few of us living in Illinois, The Prairie State, have ever seen a true prairie, for most of this unique, native plant community has disappeared. The few remaining fragments should be valued for their beauty and rarity, and as living, historical relics which reveal a glimpse of what early settlers found when they came to Illinois.

What is the prairie and why is it disappearing? How can prairie remnants be recognized, and what plants can we expect to find there? These are among the questions which this booklet will help answer for the interested beginner as well as for the botanist or conservationist who may wish to locate, preserve, and study the prairie flora.

### THE ORIGINAL PRAIRIE

Nearly three centuries ago, when the first French explorers made their way through the Illinois country by way of the rivers, grasslands covered much of what is now known as Illinois. Woodlands were present, too, but there were vast stretches where the principal plants were grasses, some so tall that a man could soon be lost in them. Herbaceous plants with bright-hued flowers grew among the grasses, making the great meadows (or prairies as the French explorers named them) colorful from spring to fall.

To the early explorers, travelers and settlers, the prairie was a place of beauty and a source of plentiful game. But much about the prairie was unknown to these people. The modern ecologist is able to tell us more, for he understands the prairie as a complex, interrelated, self-maintaining community of plants and animals. This community is made up of those species which thrive best under conditions of moisture, light, temperature, and soil which exist there, just as other communities thrive under the conditions found in forests, bogs, or deserts. But it took a very long time for each of these communities to develop and become stable. The process of development toward stability is known to the ecologist as succession, and the final stage of succession is known as the climax, or the climax community. The stable climax community is able to maintain itself indefinitely, unless the climate changes drastically, or the community is disturbed by outside forces.

In Illinois, the prairies remained largely undisturbed for many years, following the arrival of explorers, and even after the coming of early settlers. At first, the settlers thought the prairie soils were infertile since no trees grew there. Though they were awed by these vast open spaces after traveling through the dense, dark forests to the east, they settled along the rivers and in places where there were groves of trees. (Thus, Downers Grove, for instance.) The prairie offered no building materials, no protection from winter storms, and there was always the threat of prairie fires.

Even when it became known that the prairie soil was rich, the farmers found that their crude plows were not suited to turning the prairie sod, and they continued to clear the woodlands for farming. But with the development of a steel plow in Illinois about 1837, all this was changed. Soon the great prairies that had stretched from Chicago to southern Illinois and westward across the Mississippi were plowed for corn and other crops. This plowing was of great significance to the prairie, and its effect can be seen when we understand the nature of prairie plants.

Just as the forest is characterized by trees, the prairie is characterized by grasses. Among these grasses, broad leaved flowering plants (known collectively as forbs) are found growing. Most of these prairie grasses and forbs are perennial, coming up each year from long-lived roots. These roots may live for decades or perhaps even for centuries, and are established deep in the soil, in some cases 15 to 20 feet deep.

By means of such roots, prairie plants are able to draw on ground water in times of drought and if necessary, on food stored during the previous growing season. Even after severe prairie fires, they can grow again from their roots the following season. But being as dependent as they are upon these perennial roots, prairie plants are especially vulnerable to the plow, and eventually most of Illinois was plowed.

#### THE PRAIRIE TODAY

If plowing were stopped so that fields could lie fallow, and if a rich prairie flora were present in surrounding areas, there could be a slow re-establishment of the original plant community. However, this is unlikely to happen today. So little prairie remains, and so few fields are allowed to lie fallow, that the happy coincidence of a fallow field with a rich source of prairie seed existing nearby is rare. Under the best conditions, a prairie may take at least 30 years to reach stability and probably 100 or more. Man, who plows, mows, sprays, and builds, does not usually leave the land alone that long, especially if it is flat and fertile, or profitably zoned. This is the main reason that prairie does not ordinarily re-establish itself today.

The rich, black-soil prairies, turned to agriculture long ago, were the first to disappear. Less appealing land was left alone for a time, but now even the low prairies and marshes are being drained

and filled. Sand prairies are disappearing as homes and industrial plants are built on the dunes and sand flats.

Since man is rapidly destroying those places where prairies once flourished, the prairie as a community and the plant species themselves are in grave danger of disappearing altogether. Agriculture, industry, roads, and housing have gobbled up all but isolated scraps of original prairie. Few, if any, examples of rich, undisturbed prairie remain. Most of what is left shows severe signs of having been disturbed. Degraded prairies in various stages of recovery are seen. Species which we would normally expect to find are not present because of set-back resulting from disturbance.

Only a little prairie of any kind is left. It is found here and there, usually along railroad tracks, in old and abandoned cemeteries, in steep or wet places which were difficult for the farmer to cultivate, and occasionally in corners of fields or along fence-rows.

If the prairie flora is to survive, the pitifully few remaining pieces of prairie must be deliberately sought out and protected. Ironically, old prairie cemeteries offer the most promising sites, since the land is legally secure. There, many native species may still be present, and others can be restored, and the cemeteries enclosed with protective fences. This kind of local preserve, under the supervision of a knowledgeable botanist, would be a worthy project for local conservation groups and garden clubs. With the prairie fast disappearing, such preserves will be valued for their botanical and historical interest, and for their beauty.

Along with the preservation of remnants of original prairie, larger areas must be set aside for the painstaking re-creation of new prairies. The University of Wisconsin pioneered in prairie restoration, starting its work in 1935. In 1963, The Morton Arboretum began a prairie restoration project where plants are being grown from locally collected seed. More projects like these need to be undertaken whenever possible.

However, artificially created prairies are not enough. Natural prairies of all kinds are needed for research and for teaching, as outdoor laboratories and as living museums. A better understanding of the plants and animals which originally lived here will help us as we use the land in new ways. These are a few of the reasons for saving what is left of the original prairie. But anyone who has experienced the excitement of recognizing a prairie remnant knows that the rarity and beauty of the prairie are reason enough for protecting it."

## II Progress to date

A prairie committee, chaired by Bess Caseley and assisted by Bonnie Potthoff, was formed by Woman's Club last spring, and together with the ecology committee, headed by Barbara Peterson, began making



plans to reclaim the unmowed Park District land on Jackson Street. John Banaszak, science teacher at Maercker School and a Morton Arboretum prairie volunteer, had visited the land the spring of 1973, identifying some 20 prairie plants at that time. He had already begun to use the land as a teaching aid in his seventh grade biology classes at Maercker.

An attempt was made to burn the prairie last spring but the weather did not cooperate. However, volunteers were able to clear trash, grass clippings and dead tree branches from the area. They also began to cut back the sandbar willow groves and the elm and hawthorns sprouting here and there. Prairie seeds donated by Wayne Lampa, head naturalist at The Landing, DuPage County Forest Preserve District Environmental Education Center, were planted. Many undesirable plants (weeds - mostly European imports) were pulled or at least the seeds were removed. Paths were established. Volunteers, with the assistance of Mr. Lampa and Mr. Banaszak, identified some 30 more varieties of good prairie plants as they came into bloom over a 16-week period, swelling the total now known to grow there to over 50. Recently, seeds have been gathered from other prairies for use in enriching ours.

### III. Plan for the next 12 months

On September 28, Dr. Betz, author of the first part of this report, who is a leading North American specialist on natural prairie, visited the Jackson Street site and, after walking it, gave us a realistic appraisal of what we have.

Our land, he said, looks as if it was under cultivation for a time back in the 1800's. When land is broken by a plow or disturbed in any way, undesirable plants begin to grow, crowding out the native plants in some instances. That is why we have bull thistle, ragweed, Queen Anne's Lace, Velvet Leaf, Timothy Grass, for example. These are plants that have gotten a foothold because of the disturbed ground. Our "remnant prairie" however, has made great strides by itself, in its struggle to once more become a stable climax community. It is "on its way back" according to Dr. Betz, and with some assistance from volunteers, even within a two-year period, should change its appearance greatly for the better. Ten years from now, with continual looking after, burning, etc., we will have a very good prairie study plot. He feels this is a worthwhile community activity and an excellent use of this land. He says very few virgin prairies exist today. Most, when discovered, are in a condition similar to ours and must be helped to recover. He then gave us suggestions as to how we should proceed immediately in order to achieve this end.

This is our resulting plan:

This fall we must pull weeds, cut down others, cut back more elm, hawthorne, sandbar willow and other woody growth which doesn't belong on a prairie and kill its root systems permanently with woody plant killer. We should cut down the two cottonwood trees and the one large willow, and permanently kill the stumps.

We have received permission from the Environmental Protection Agency and will burn the entire area this fall after the first of November. The Clarendon Heights Fire Department is cooperating with us in this effort. An explanation as to why the burning: Those who manage prairies find that burning is an effective way to eliminate undesirable plants and to clear the ground so as to give seeds from the prairie plants a chance to germinate more readily. Prairie plants as we know them are species that have survived countless severe prairie fires. Their seeds are not even affected by fire. By burning, nutrients needed by these plants are also returned to the soil. We have been told that we will see plants growing next summer, after we have burned, that we didn't even know were there, because the burning will have killed weedy plants that were choking them before. Now they will have a better chance to grow.

We must collect seeds of Indian Grass (this we've done already), Switch Grass, Blue Joint Grass and Cord Grass, and after we burn, much of this seed must be raked into areas needing more prairie grasses. Also, holes must be filled and seeded. Any seed we cannot procure ourselves, we will be able to get from Dr. Betz and/or the Morton Arboretum. Indian Grass and Switch Grass must be grown on the area where clay was dumped about a year and a half ago, also possibly some Little Bluestem (we have seed). The low areas must be planted with Prairie Cord Grass and Blue Joint Grass. We must also gather seeds from Prairie Dock and Compass Plant (this we've done already), Purple Coneflower, Rough Blazing Star and False Dragonhead. These seeds plus some of the grass seeds will be cleaned, stratified (refrigerated), and then next March, Jane Cullen will grow flats of prairie plants in her greenhouse. She will also attempt to grow Seneca Snakeroot from seed, an almost impossible task, since it is partially parasitic. The resulting plants will be planted by hand at sites most acceptable to their environmental needs about May 15.

Next summer, volunteers will be needed to continue to eliminate undesirable plants that the burning didn't kill completely and to finish killing the sandbar willow suckers. We also envision developing an identification manual of sorts, keying each plant by numbered stakes on the prairie itself. The manual would devote a page to each plant growing on the prairie with a drawing, growth habits, interesting information and most important characteristics for identification purposes. We would like to duplicate these pages inexpensively and put them into inexpensive binders so that anyone in the community can have access to them. We would also like to continue to add to our collection of color photographs of the flowering plants found there.

Maercker School science classes are continuing to use the prairie for field trips. Dr. Betz envisions its use also by Hinsdale Central in future years.

Public Affairs, 6/20/66, 1966, 1967, 1968, 1969, 1970, 1971, 1972, 1973, 1974, 1975, 1976, 1977, 1978, 1979, 1980, 1981, 1982, 1983, 1984, 1985, 1986, 1987, 1988, 1989, 1990, 1991, 1992, 1993, 1994, 1995, 1996, 1997, 1998, 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022, 2023, 2024, 2025

We would like to develop a corps of knowledgeable volunteers who, upon call, would be able to take anyone who requests it, on an informal educational tour of the area.

If the prairie between 7th and 8th streets on Jackson (along Highway 83 - parallel to ours) is helped back to its original status (another pet project of Dr. Betz) we foresee a cooperative group of tour takers, able to take visitors to either or both sites. The Hinsdale site is much drier than ours and will always have a very different personality. Therefore, a person would gain much by visiting both.

Please realize that because of size limitations, our "remnant prairie" will never be much more than that -- a mini-prairie, if you will, but still a historical site for study and enjoyment -- and recreation -- a nearby respite from our busy, modern world -- a short walk for us in Golfview Hills, but never a real prairie with acre upon acre of color...tall grasses waving in the wind as far as the eye can see...that we will have to imagine as we walk the paths of our small one.

Administrative notes, 1966-1999

1966 - 1967 - 1968 - 1969 - 1970 - 1971 - 1972 - 1973 - 1974 - 1975 - 1976 - 1977 - 1978 - 1979 - 1980 - 1981 - 1982 - 1983 - 1984 - 1985 - 1986 - 1987 - 1988 - 1989 - 1990 - 1991 - 1992 - 1993 - 1994 - 1995 - 1996 - 1997 - 1998 - 1999

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Prairie plants found on land at corner of Jackson and 58th Street, north side,  
as of Sept. 24, 1974

Allium cernuum --- Nodding wild onion  
 Allium canadense --- Wild onion or Wild garlic  
 Andropogon gerardi --- Big bluestem grass  
 Asclepias incarnata --- Swamp milkweed  
 Aster laevis --- Smooth blue aster  
 Aster novae-angliae --- New England aster  
 Aster sagittifolius drummondii --- Drummond's aster  
 Bidens sp. --- Beggar's ticks  
 Convolvulus spithameus --- Low bindweed  
 Galium boreale --- Northern bedstraw  
 Helianthus grosseserratus --- Prairie sunflower  
 Helianthus giganteus --- Tall or giant sunflower  
 Iris virginica V. shrevei --- Blue flag iris  
 Lespedeza capitata --- Round headed bush clover  
 Liatris aspera --- Rough blazing star  
 Lithospermum canescens --- Hoary pucoon  
 Lobelia spicata V. hirtella --- Pale spiked lobelia  
 Lycopodium Americanus --- Water horehound  
 Lysimachia ciliata L --- Fringed loosestrife  
 Monarda fistulosa --- Wild bergamot  
 Panicum leibergii --- Panic grass  
 Physostegia Virginiana --- False dragonhead  
 Polygala senega --- Seneca snakeroot  
 Pycnanthemum Virginianum --- Mountain mint  
 Ratibida pinnata --- Prairie coneflower  
 Rosa blanda --- Smooth rose  
 Rosa Carolina --- Pasture rose  
 Rudbeckia --- Black-eyed susan  
 Scutellaria lateriflora --- Mad dog scullcap  
 Scutellaria parvula --- Small scullcap  
 Senecio pauperculus --- Golden ragwort  
 Silphium integrifolium --- Rosin weed  
 Sisyrinchium albidum --- Blue-eyed grass  
 Solidago altissimum --- Tall goldenrod  
 Solidago juncea --- Early goldenrod  
 Solidago gigantea --- Late goldenrod  
 Solidago graminifolia --- Lance leaved goldenrod  
 Solidago Reddellii --- Reddell's goldenrod  
 Solidago rigida --- Stiff goldenrod  
 Spartena pectinata --- Prairie cord grass  
 Stachys palustris --- Woundwort  
 Thalictrum dasycarpum --- Tall meadowrue  
 Thalictrum --- Early meadowrue  
 Tradescantia ohimensis --- Spiderwort  
 Veronia fasciculata --- Ironweed  
 Vicia Americana --- American vetch  
 Vida pedatifida --- Prairie violet (?)

More current additions:

Other plants....  
 Aster laterifloris --- Side flowering aster      Aster pylosis --- Hairy aster  
 Achillea millefolium --- Yarrow      Juncus tenuis --- Roadside rush  
 Apocynum cannabinum --- Indian Hemp      Prunella vulgaris --- Selfheal  
 Asclepias verticillata --- Whorled milkweed      Sium suave --- Water parsnip  
 Eupatorium altissimum --- Tall boneset      Phlox glaberrima --- Smooth