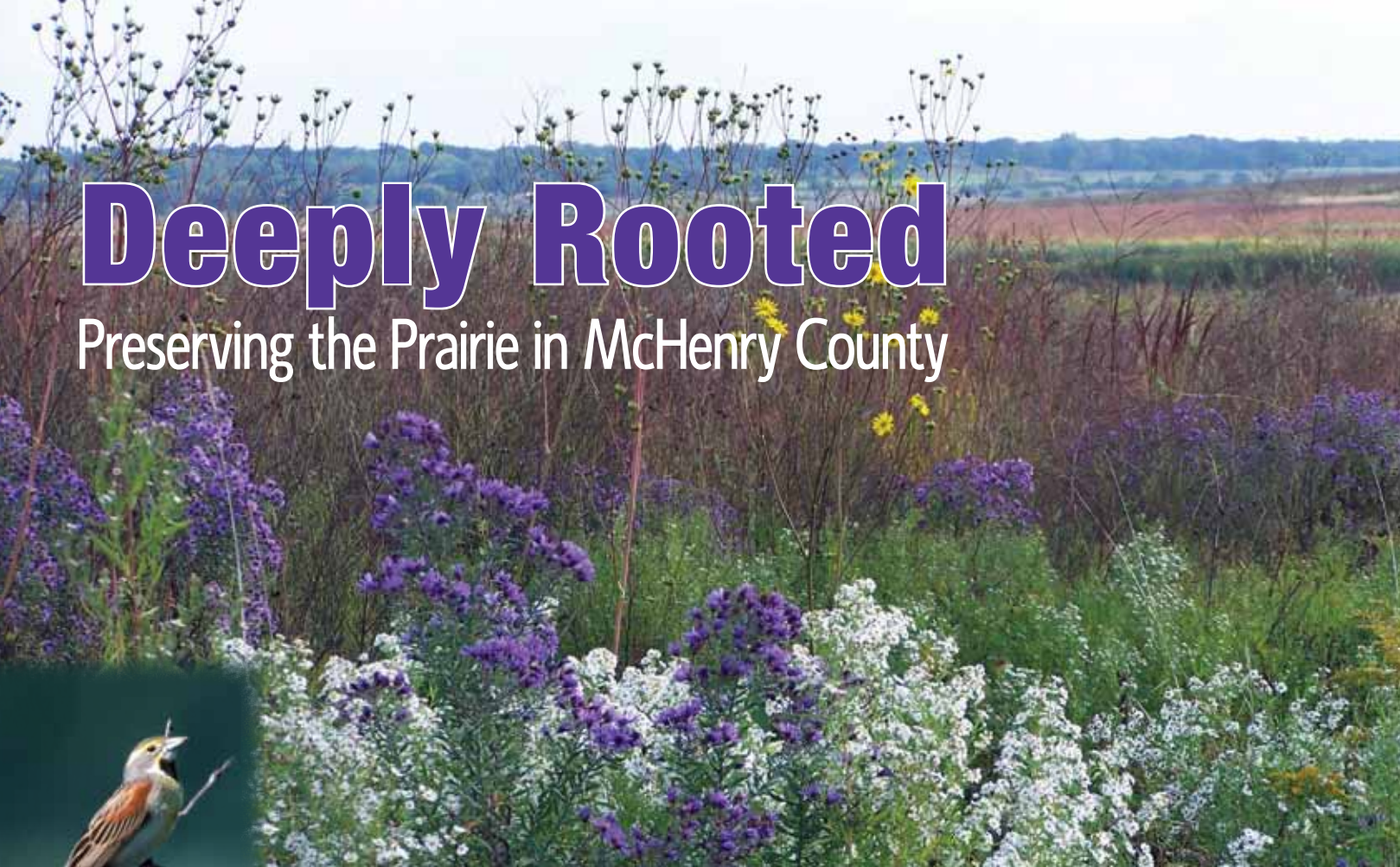


Deeply Rooted

Preserving the Prairie in McHenry County



Did you know as many as 300 different plant species can grow on less than three acres of a healthy prairie ecosystem? And did you know this same ecosystem can support more than 3 million insects per acre? Did you know that tall-grass prairie plants like the compass plant can have roots extending 15 feet deep?

When the first settlers arrived in this area, they were met by a seemingly endless expanse of grasslands—in fact roughly two-thirds of the entire state or 21 million acres.

Within these vast grasslands plants like the big bluestem grasses with its fibrous, interlocking root system formed the famous prairie sod that also provided the fertile farmland needed by the settlers. Both the compass plant and big bluestem were part of a diverse ecosystem that once supported massive migration of bison, and is now more endangered than the rain forests.

Today, these large tracts of prairie have long since been subdivided into agricultural land tracts. Ironically, the prairie habitat that was once the largest habitat in the state now occupies the smallest amount of acreage. Plowing, grazing, fire suppression and the loss of water sources have altered the native prairies of our area. Rare are the pockets of land where high-quality prairie remain—surviving on protected open space, abandoned cemeteries, and railroad right-of-ways.

The Conservation District actively manages roughly 4,005 acres of prairie within 28 District sites that receive some degree of invasive species removal, burning, reseeding and/or brush clearing.

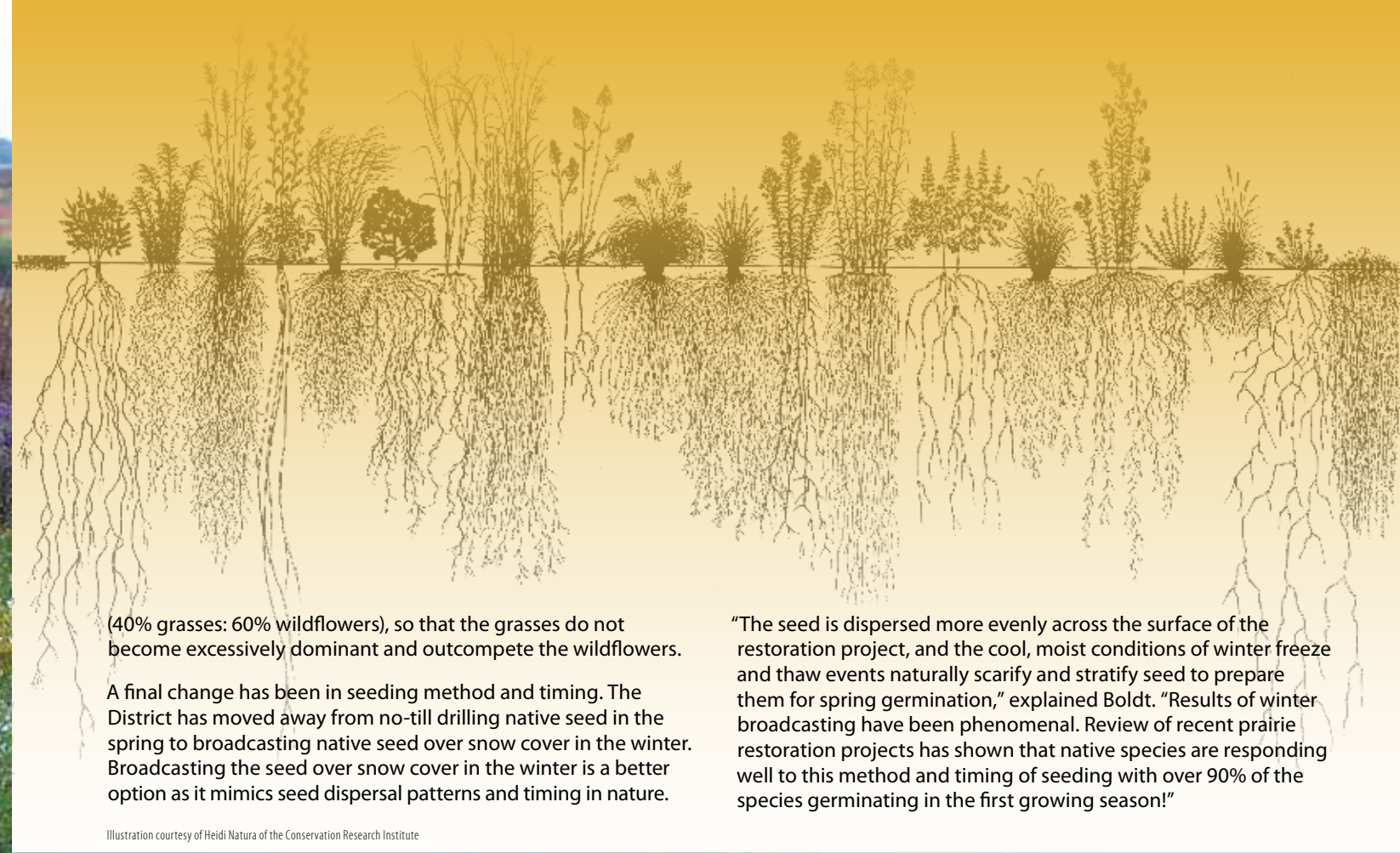
Restoration plays a critical role in creating healthy habitat where native plants, birds, insects and butterfly species can thrive. Last year, large scale restoration projects were completed on 983 acres at Lake in the Hills Fen, Marengo Ridge, Pleasant Valley, North Branch, and Goose Lake.

In recent prairie restorations, the District has witnessed noticeable improvements in the health and diversity of the entire ecosystem. District Plant Ecologist Laurie Boldt attributes this to the change in seed collection procedures, seed mix design, the seeding method and timing.

“The native seed collection program now incorporates volunteers to help collect seed, and has been expanded to collect species that bloom and ripen earlier in the year (late spring/early summer). This allowed the District to increase quantities of seed in storage, as well as provide a greater variety of natural plant species to choose from when creating seed mixes to sow in enhancement and restoration projects. Seeds that are collected, harvested, and resown on District sites preserves our region’s unique genetic diversity, to the highest level possible,” said Boldt.

In recent years the District changed its seed mix design to reflect the diversity of natural plant communities across McHenry County. Currently 11 custom seed mixes are created: fen, sedge meadow, wet prairie, mesic prairie, dry prairie, gravel hill prairie, savanna, woodland, marsh, and two competitive wetland mixes to be used in areas prone to invasion by the non-native, invasive reed canary grass.

These mixes have been altered to reflect the latest research. The mixes now display increased species diversity, a recommended seeding rate of 40 seeds/square foot, and a more appropriate ratio of graminoids (grasses, sedges, and rushes) to wildflowers/forbs



(40% grasses: 60% wildflowers), so that the grasses do not become excessively dominant and outcompete the wildflowers.

A final change has been in seeding method and timing. The District has moved away from no-till drilling native seed in the spring to broadcasting native seed over snow cover in the winter. Broadcasting the seed over snow cover in the winter is a better option as it mimics seed dispersal patterns and timing in nature.

“The seed is dispersed more evenly across the surface of the restoration project, and the cool, moist conditions of winter freeze and thaw events naturally scarify and stratify seed to prepare them for spring germination,” explained Boldt. “Results of winter broadcasting have been phenomenal. Review of recent prairie restoration projects has shown that native species are responding well to this method and timing of seeding with over 90% of the species germinating in the first growing season!”

Illustration courtesy of Heidi Natura of the Conservation Research Institute



Excellent examples of restored prairie can be seen at:

- **Marengo Ridge** by the picnic shelter, which also provides an elevated view of the area and vast expanse of open space
- **Kishwaukee Corridor at County Line Road Access** in Marengo
- **Kishwaukee Headwaters** in Woodstock now in its sixth year of restoration where blooms are bountiful
- **Lake in the Hills Fen** provides a 1.3 mile mowed hiking trail through the restored prairie from the new District entrance off Jefferson St.
- **North Branch** in Richmond where the 500 plus acres attract numerous grassland birds visible from the 1.5 mile trail.

This is the fourth year the District is looking for seed collection volunteers to assist with the fall gathering. Last year, 19 volunteers generously contributed 120 hours to the program. Seed was collected from 105 species, with a total cleaned or processed weight of ~809 lbs, with a value of ~\$54,000 based on local nursery prices. If you are interested in helping out with this seed collection this fall, please attend the Seed Collection Volunteer Orientation on September 6, from 7–8:30 p.m. at the Lost Valley Visitor Center in Glacial Park. See page 12 for details.