that moved through. These giant walls of ice formed and spread at a time when the climate in North America was much colder than it is now. The massive weight and grinding action of the glaciers pushed the soil and flattened it. Four major glaciers covered parts of Illinois during this period that ended about 12,000 years ago. One of the glaciers, the Illinoian, moved as far south as Carbondale in southern Illinois. This point was as far south as any glacier in the United States reached in this period of glaciation.

The weather conditions in Illinois over thousands of years helped determine that prairies would exist in Illinois. The climate of the prairies is characterized by hot, dry summers and cold winters. When these conditions developed about 3,300 years ago, the tallgrass prairie became a major part of Illinois.

As the climate warmed and the glaciers began to melt, huge amounts of water flowed from them. These moving waters helped to form today's river valleys, especially of the large rivers in Illinois, like the Mississippi and Illinois. The waters also carried much sand and gravel. This load of rocky material was dropped to the river bottom when the water current slowed. Eventually the glaciers produced less water, and the rivers became smaller. Some of the material carried by the rivers was now out of the water. Along the Illinois, Mississippi, Green and Kankakee Rivers, sand prairies were formed by this process.

### **TYPES OF PRAIRIES**

Prairies are a mixture of grasses and forbs. Forbs are plants with broad leaves, like wildflowers. Grasses have narrow leaves. Grasses are the dominant plant type in the prairie. To compete with grasses, some forbs send their roots further into the soil than the grasses so that they may reach water and nutrients that

In 1820, Illinois had 22 million acres of prairie and 14 million acres of forest. Prairies were mainly in the northern two-thirds of the state with forest in the southern one-third. All but nine current Illinois counties had large areas of prairie. In central Illinois, trees could only be found in scattered sites called "prairie groves." Illinois was the first state that settlers from the eastern part of the country travelled to that had such large areas of grasslands. These settlers are responsible for calling Illinois the "prairie state."

By 1900 most of the Illinois prairie was gone. The development of the self-cleaning steel plow and the richness of the soil led to the conversion of most of this land to agricultural practices. By 1978 less than 2,300 acres of highquality prairie remained. Most of the undisturbed prairie sites in Illinois today may be found along railroads, in pioneer cemeteries or on land unsuitable for farming.

### PRAIRIE PLACE NAMES

Living on the prairie was not easy. The many biting insects found there made life miserable for everyone. The grasses grew so high that people could not see over them. People got lost because there were few landmarks to guide them. The weather, ranging from droughts to blizzards, was often unpleasant. Yet, many settlers remained.

Some prairie sites were given unusual names by the people who settled there. "Froggy Prairie" in Adams County came about from a spelling bee. The frogs on the prairie were calling so loudly during the spelling bee that the teacher had to shout to be heard. A student said that the place was "froggy," and the name stuck.

"Macoupin Prairie" in Greene County comes from the Native American word "macoupin." It was the name they gave to an aquatic plant whose roots were used for food. Today, we call the plant

"Crow Prairie" in Putnam County was named for the many crows in the region. "Horse Prairie" in Randolph County was named for wild horses in the area that had escaped from French settlers. "Buckeye Prairie" of Christian County alerted people that the settlers here were from Ohio, the Buckeye State.

### CROSSWORD PUZZLE

Use the information on this poster to help you

- 3. an extirpated prairie animal
- 4. a plant with broad leaves, like a wildflower 6. a type of grassland
- 9. someone who moved to Illinois to settle 10. the prairie soil, packed with plant roots
- 1. a massive, moving wall of ice 2. a butterfly of the prairie
- 5. the dominant plants of the prairie (have
- 7. a prairie amphibian, the American \_\_\_ 8. the type of prairie where leadplant grows

Fires occurred often on the prairies. Because the around was flat and unbroken by roads or other objects, fires moved quickly and covered huge areas. Fire is good for the prairie ecosystem. Fire removes the dead stems and leaves of prairie plants above ground without killing the roots. These plants can grow again after a fire from either their roots or their seeds. Fire helps to stop the growth of shrubs and trees in the prairie by killing the living parts that are above the soil. These plants do not grow back from their roots as easily as grasses. It is believed that frequent fire was the reason that Illinois was covered with mostly prairie instead of forest when the pioneers arrived.

### **PRAIRIE PLANTS**

When the settlers first arrived in Illinois, many thought that the prairie soil was poor since no

#### trees grew on it. They were wrong. The soil was and is very rich in nutrients that plants need to grow. Bacteria and fungi break down dead organisms, returning nutrients to the soil. Grasses grow so densely on the prairie that the soil is

packed with their roots. This prairie "sod" helps

northern harrier

to conserve both soil and water. It acts like a sponge when rain falls. Some settlers even used sod to build their house.

Big bluestem is the state prairie grass. This plant may grow to a height of 12 feet!

The compass-plant has leaves in a north-south arrangement to allow the most sunlight to be absorbed. The plant may grow 10 feet tall.

Black-eyed Susan plants are covered with hairlike structures, making them feel rough when touched.

**Downy gentian's** flowers are blue-purple. When downy gentian is found today in a natural prairie, it means that the area is undisturbed.

Rattlesnake master, as its name implies, was used to make a drink as an antidote to rattlesnake venom. Pioneers believed that if this plant was present then the eastern massasauga, a prairie rattlesnake, must be near.

### PRAIRIE ANIMALS

Prairie animals must withstand changing weather, danger from predators, dry conditions and other hazards, like fire. To meet these challenges, many prairie animals are able to burrow into the soil, run fast, fly or blend into their surroundings. Prairie birds must often nest on the ground since there are few trees available.

The **northern harrier** is an endangered Illinois raptor. This hawk has slim, long wings and a long tail. Its white rump patch makes it easy to identify.

The Illinois state insect, the **monarch butterfly**, lives on the prairie. The female lays her eggs on milkweeds, which the larvae use for food when they hatch. The monarch is a migratory butterfly.

The **sedge wren** builds its nest in the prairie grasses. This tiny bird eats insects and spiders that it finds in the grasses or on the ground.

The thirteen-lined ground squirrel eats stems, leaves, seeds and roots of prairie plants and insects. This small rodent lives in burrows it digs in the rich soil. The burrows may be as deep as 1 1/2 feet

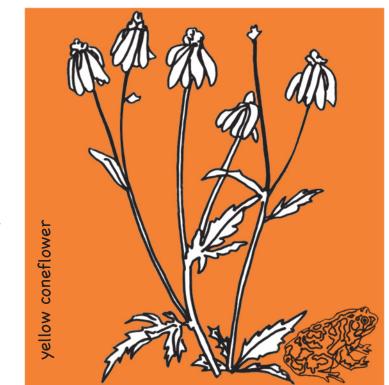
The American toad is a prairie amphibian. It is active at dusk or at night, seeking insects and worms to eat. Females tend to be larger than

## SPECIES OF THE PRAIRIE

TOWN THE SECRETARY OF THE WAY WAY THE WAY THE

Because much of the prairie has been destroyed, many of the organisms that depend upon it for their habitat (food, water, shelter, space) have been forced to move to new habitats or have become very scarce themselves. Did you know that bison and elk once lived in Illinois? They were the largest mammals of the Illinois prairie. Many were killed by pioneers and used for food and hides. Others lost their habitat to agriculture and settlement. With the loss of habitat, these animals vanished from Illinois, although they still lived in other states. They were extirpated.

Today the list of threatened or endangered prairie species in Illinois includes plants, butterflies, frogs, snakes, birds and mammals. Without the large continuous grasslands, these organisms will always find survival to be difficult. Prairie restoration efforts help to keep these organisms alive.



### **CELEBRATE THE PRAIRIES!**

The third full week in September is celebrated as "Prairie Week." This annual event occurs thanks to a law passed by the state legislature. The purpose of the observance is to develop in people an appreciation of prairies. Many activities are conducted during this time in places like parks and nature centers. Demonstrations on how to develop prairies and nature walks through prairies are some of the events in which you might want to participate.

### **CAN YOU FIND THEM?** COUNT THE NUMBER OF EACH TYPE OF PRAIRIE

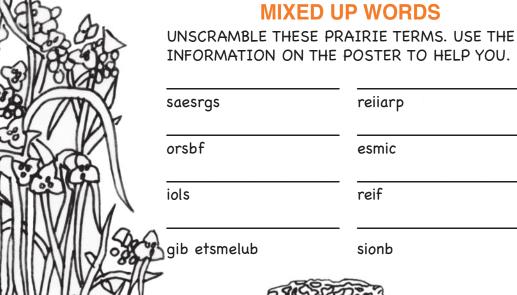
SPECIES DRAWN ON THIS PAGE.

AMPHIBIAN . PLANT \_\_\_\_\_

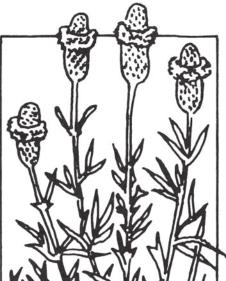


### **MAZE**

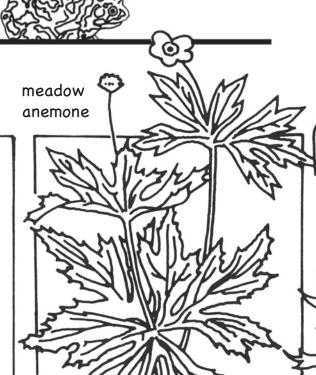
HELP THE THIRTEEN-LINED GROUND SQUIRREL FIND ITS WAY INTO ITS BURROW.



purple prairie clover





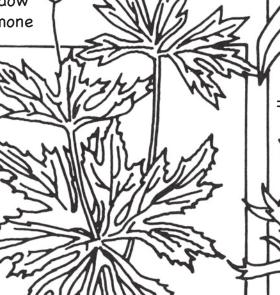




thirteen-lined ground squirrel

monarch butterfly

SWF



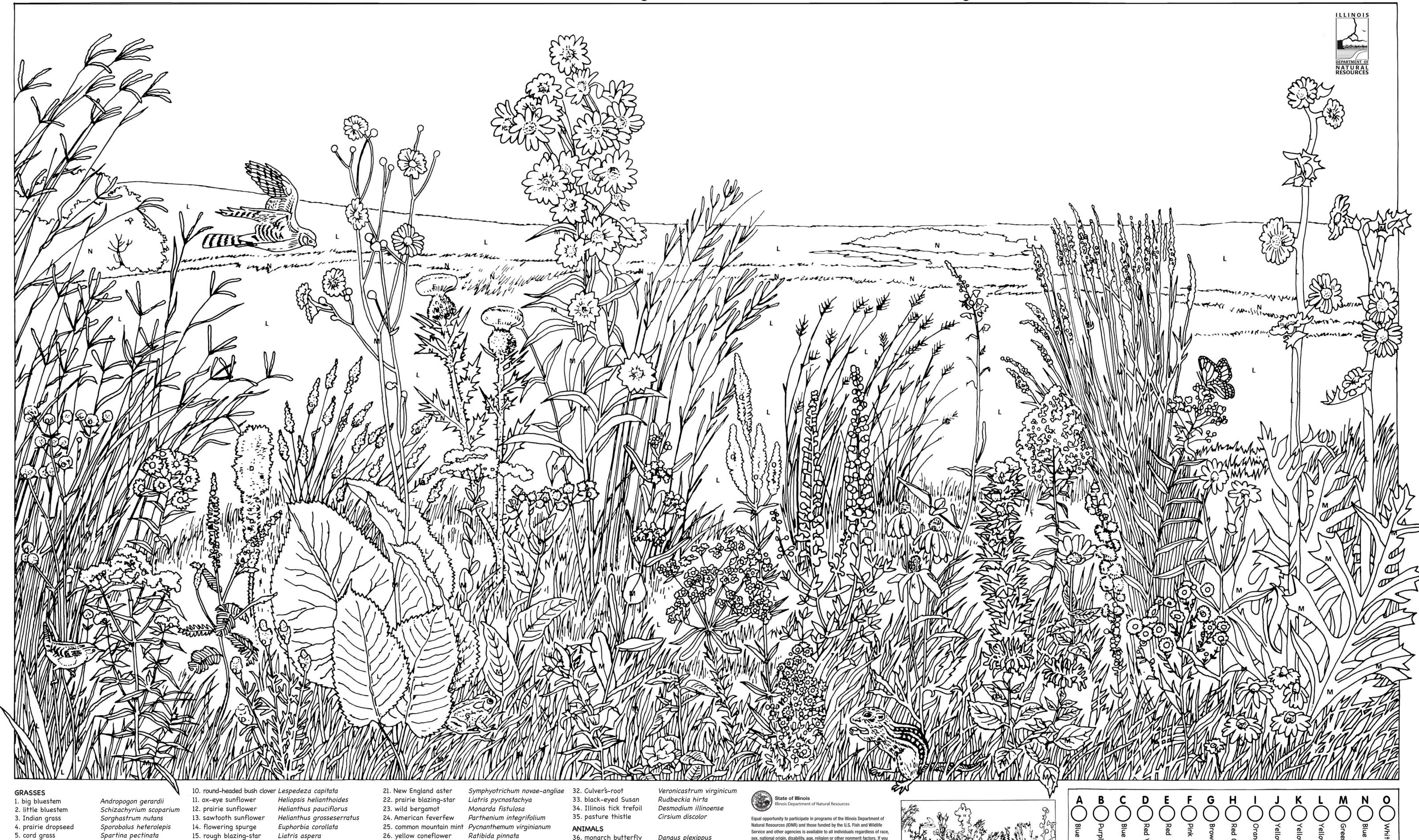
- 111 Mar 1/4/2 2000 Ment ad/1/11 4 21/1/19







# Summer Prairie Wildflowers and Grasses of Illinois



36. monarch butterfly

ground squirrel

40. northern harrier

37. American toad

38. thirteen-lined

39. sedge wren

Ruellia humilis

Silphium laciniatum

Oligoneuron rigidum

Solidago speciosa

Silphium terebinthinaceum

27. wild petunia

29. prairie dock

Symphyotrichum oolentangiense 31. showy goldenrod

28. compass-plant

30. stiff goldenrod

16. Missouri ironweed

17. white wild indigo

18. prairie milkweed

20. sky-blue aster

19. leadplant

Eryngium yuccifolium

Gentiana puberulenta

Symphyotrichum ericoides

Dalea purpurea

6. rattlesnake master

8. downy gentian

9. heath aster

7. purple prairie clover

Vernonia missurica

Asclepias sullivantii

Amorpha canescens

Baptisia alba

Danaus plexippus

tridecemlineatus

Circus hudsonius

Spermophilus

Anaxyrus americanus

Cistothorus platensis

sex, national origin, disability, age, religion or other nonmerit factors. If you

rights office and/or the Equal Employment Opportunity Officer, IDNR, One

Natural Resources Way, Springfield, IL 62702-1271; 217/785-0067; TTY

217/782-9175. This information may be provided in an alternative format if required. Contact the DNR Clearinghouse at 217/782-7498 for assistance.

Printed by the authority of the State of Illinois • 3,800 • 6/20 • 20-0813  $\stackrel{\bigcirc}{}$ 

Color these Circles first!

Illinois Prairies © 2020, Illinois Department of Natural Resources, Springfield, Illinois

believe you have been discriminated against, contact the funding source's civil