

Earthtones

Winter 2014

The Riches Under Our Feet

Slightly over two centuries ago, the first European settler moved into what is now Iowa. Julien DuBuque received both permission from the local Meskwaki Indians and the Spanish government (who owned the territory at that time) to live and mine in the area that now bears his name.

Just south of Dubuque lies the Mines of Spain State Park. Here, DuBuque and his Indian workers mined lead. Who would have guessed the greater riches lay to the west?

At various times throughout Iowa's history, coal, gypsum, minute quantities of gold, and—even a few barrels from our own county—oil, was removed from the land. Yet our most valuable natural resource works best when left on the landscape.

In 1837, John Deere invented the steel plow, and for the first time, Iowa pioneers could finally discover our black gold: rich, deep prairie soil. In fact, Iowa reputation as an agricultural state is well-deserved. The tallgrass prairie that covered 80% of our landscape created no less than one-fifth of the world's Grade A soil.

The fertility as well as the incredible depth of our great soil originates from the very nature of prairie root systems.

To understand this, first let's look at what soil is exactly. It's more than clay or sand or silt. Living soil also includes air, water, living organisms, and



decaying matter or humus. Rich soil, high in nutrients and humus tends to be dark to black.

If we look at forest soil, we'll see that most tree roots only penetrate eighteen inches into the soil. Tree roots spread out rather far, but not deeply. Decaying leaves darken the initial few inches of the soil, but you don't need to dig much before the soil lightens significantly.

In comparison, prairies usually have more biomass (or living growth) underground than above. An eight foot big bluestem grass may have over twelve feet of root systems. Plus, those roots, while not huge in size individually, are a thick tangle of threads difficult to penetrate (hence the need for a steel and not wood plow to cultivate).

One reason for the depth of the roots was to obtain moisture. Prairies tended to exist on drier areas in Iowa where the timbers were found near the wetter river plains. The net-like nature of the roots allowed the plant to catch as much water as possible and also keep out encroaching trees and other non-prairie plants.

As the plants die off, these thick roots add to the soil's nutrients, creating rich soil several feet deep 14–16 inches of soil.

With such rich soil, it should not be surprising that the prairies were plowed up for farmland. Come visit the Smithsonian traveling exhibit on this subject this winter at the Conservation Center and learn more about it and its role in our history.

By Pamela Holz

Cabin Bound Family Activities

Between snowstorms and frigid temperatures, we can't always let our children go outside and play. Here are some other ideas to do when those games and other standbys get old and stale.

Indoor Campfire: Either use a stable candle or create a fake fire with construction paper. Turn out the lights and sit around telling stories. Add to it by making microwave s'mores and drinking hot cocoa (with the spare marshmallows).

Mythmaking: Works great with the campfire or stand alone. One person begins the story and everyone contributes in turn. Set rules for topic, content or length, if need be.

Proverbs: Write down famous sayings on slips of paper (e.g. water off a duck's back, look before you leap, etc.). Give each person a slip and have them draw the saying. Collect the drawings and have the rest of the family try to figure out the proverbs they represent.

Nature Skits: Write down on slips of paper little scenes that may occur in winter (sledding, skiing, winter birding, walking across the ice, etc.) and have them act them out. Rate the actors in categories such as funniest, most daring, most melodramatic, etc.

What if? Situations: Take some time to think of concerns or teachable ideas you want your children to remember and write out related situations. Read the scenario and have each member tell what they would do and why. Discuss answers.



Iowa Plant Lore Quiz

Often we think of medicine and food coming from the store. However, both Native Americans and pioneers used wild plants extensively for a wide range of uses. Can you match the prairie plant with some of its uses? Answers on page 3.

1. Alleviates arthritis & supposedly cures baldness
2. Boosts the immune system
3. Rich in vitamin C and treats headaches
4. Keeps a mother healthy after childbirth
5. Relieve pain, treat colic, stop bleeding, & more
6. A wash for eczema
7. Seed pods rattles and knife wound treatment
8. Treatment of earache and sore eyes
9. Roasted pods eaten & roots used for soap
10. Can be eaten & a cure for dizziness
11. Used for mink traps and to prevent rabies
12. Revive someone who fainted or treat insanity
13. Make smoke to drive away mosquitoes or evil spirits
14. Bee sting treatment and swollen throats

- A. Asters
- B. Blueflag iris
- C. Goldenrod
- D. Ground cherry
- E. Leadplant
- F. Mountain mint
- G. Nettles
- H. Prairie false indigo
- I. Prairie sage
- J. Purple coneflower
- K. Pussytoes
- L. Violet
- M. Willow
- N. Yucca



Prairie Points

- * Iowa prairies include 72 species of grasses and over 250 species of forbs (or flowers).
- * Iowa's prairies formed a little less than 10,000 years ago with the retreat of the glaciers during the last ice age.
- * About 5,000 years ago, the acreage of Iowa prairie peaked. The average amount, however, was about what the Europeans first saw 300 years ago.
- * Prairies establish themselves in areas of direct sunshine, high winds, and low moisture.
- * Two-thirds of prairie plant growth is underground. This allows the plant to bounce back from weather extremes and fire.
- * Fire is an important tool to maintain prairies and help reduce encroachment of non-prairie plants and open up areas for prairie wildlife.
- * Natural prairies keep out weeds and reduce soil erosion, making them perfect for roadsides. Once established, they may require little maintenance compared to typical lawn species.
- * Savannas are a type of prairie with a mix of trees such as burr oak which are resistant to the fires that burned across prairies naturally.
- * The Loess Hills is a dry prairie dominated by little bluestem.
- * During the first century of the state, we lost half our prairie topsoil to erosion.
- * Soil is the primary pollutant of Iowa's waterways.
- * Iowa has less than 1/10th of 1% of its native prairie left.
- * The largest prairie remnant is 240 acres. The Loess Hills in western Iowa contain the largest remnants.
- * The first prairie preserve was acquired in 1946, Hayden prairie in Howard County.

Thanks to the Following

Halloween Hike

Donations

- | | |
|--------------------|-----------------|
| HyVee | Walmart |
| Sass Family Farms | Duane Hammon |
| Andi & Steve Klein | SACHA |
| Noon Kiwanis | Y Kids Club |
| Fareway | Pizza Ranch |
| Chad Dolan | April Cuddeback |

Volunteers

- | | |
|------------------------|------------------------|
| Craig & Ila Capps | Jim Blakeney |
| Kane family | Barb & Bob Donkersloot |
| Don Kline | Anna & Samantha Holz |
| Jeff Koepf | Addie & Olivia Pacha |
| Linda Holz | Chad & Kyleigh Dolan |
| Bill Fredrick | Ron & Wayne Brock |
| Bailey & Rita Anderson | |

Other Assistance

- Wes Rich & Tom Basten for facilitating over \$9,000 donation from Geode RC&D
 Jeff Prier
 Iowa Bridge & Culvert



Answers to Page 2: 1.G 2.J 3.L 4.K
 5.M 6.E 7.H 8.B 9.N 10.D 11.F
 12.V 13.I 14.C

Winter Calendar

The Washington County Conservation Board meets the second Wednesday of each month. Meetings are held at the Conservation Education Center in Marr Park at 4:30 p.m.

The Conservation Education Center will be closed for the following holiday: February 17.

Sat., Jan. 11 1:00 p.m. Marr Park

Winter Adventure and Exhibit Grand Opening

Come for some indoor and outdoor fun. We will have several indoor and outdoor activities for families and individuals to enjoy. Outside, our main event will be our annual ice fishing clinic. Learn about this winter sport and see the fish with an underwater camera. Inside, tour the traveling Smithsonian exhibit *Listening to the Prairie: Farming in Nature's Image*.

Sat., Feb. 22 1:00 p.m. Conservation Center

Prairie Adventures

Roughly 80% of Iowa was once covered with prairie. These fertile soils attracted many settlers to Iowa until we would become the breadbasket of the world. We'll view the national Smithsonian exhibit currently on display and learn how it applies to us here in Iowa. Weather permitting, we'll step outside to view the Marr Park prairie and discover what the Conservation Board is doing to bring back the prairie on our properties.



Sat., March 22 12:00 p.m. Marr Park

Campfire Cooking

Come out to Marr Park and join Center Coordinator, Kathy Dolan, for a fun afternoon of campfire cooking! You will learn to cook over a campfire using pie irons, a dutch oven and foil packets. Using these methods, we will prepare, cook, and best of all.....EAT an appetizer, main meal and dessert. Don't miss out on the tasty fun! Children under 10 must be accompanied by an adult.

March 25 & 27 6:00–9:00 p.m. Marr Park

March 29 8:00–Noon Marr Park

Hunter Safety Course



Pre-registration is required. Register online at: www.iowadnr.gov/training under Hunter Education classes. Or call the Center at 319/657-2400. Attendance is required at all three sessions and participants must be 11 years or older.

April TBA Dusk Marr Park

Night Prairie Burn

Date and details to be announced.

Sun., April 27 1:00–5:00 Conservation Center

Last Day of Smithsonian Exhibit

5th Grade Mythmaking

Once again, we bring you a few of the “myths” written by Wellman 5th grade during a study of Native Americans and the importance of myths.

Why Owl Only Comes Out at Night

Many years ago, Owl flew all day long. But one day there was a battle between the Sun and the Moon. They needed animals’ help. Moon called Owl. He said, “But I don’t fly at night. My feathers are noisy and I can’t see well at night.” Moon Said, “If you join my army of animals, I will make your feathers silent, your eyesight clear at night, and I will give you talons. But if you betray me, your feathers will disappear and you will go blind.” Owl was afraid and joined Moon’s army. The Moon won the battle with Owl’s help. Owl is still scared to fly in the daytime and this is why Owl only comes out at night.

By Clarke, Natali, Jaysin

Why Rivers Never Stay Still

Long ago, when the river people still stole children, a young boy who lived on a mill had his baby sister get stolen by the river people. He got mad and decided to seek revenge for his sister. He stole a hatchet and pitchfork and followed the river to find his sister. After two weeks, he found his sister’s bones on the lakeside. That made him so mad that he took a huge breath and dove into the lake. He swam around until he found a castle made out of bones. He entered and killed river people until they fled. The river people kept on the move forever after.

By Tobin, Jesi, and Cooper

Why Bobcat is a Quiet Hunter

Once upon a time, there was a Bobcat walking in the woods and he was hunting. He was hunting a raccoon. He was hiding in the weeds. He was about to pounce on the raccoon, but he had the urge to growl. It scared the raccoon. Bobcat was so furious that he growled so loud he scared all the living animals from miles away. He set off to find the wisest owl in the forest.

When he finally got there he was so tired and hungry he ate the owl before the owl could speak.



So he set off to find the second most wisest animal, the turtle. But there was a river between the turtle and bobcat so bobcat treaded through water. There was so much mud that it stuck to bobcat’s feet. When bobcat got to turtle, he was as silent as a mouse.

By Meredith, Dominic and Emma

Washington County Conservation Board

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Members: Lyle Moen
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Bill Nickell
Barb Donkersloot

Staff: Steve Anderson, Exec. Director
Bob Bellmer, Park Ranger
Pamela Holz, Naturalist
Fritz Engel, Maint. Technician
Kathy Dolan, Center Coordinator

Washington County Conservation Board meetings are held the second Thursday of each month at 4:30 p.m. at the Conservation Education Center. Visitors are welcome.

The WCCB is an Equal Opportunity Employer.

If you would like a copy of this newsletter in larger print, please contact our office.

WASHINGTON COUNTY CONSERVATION BOARD
2943 HIGHWAY 92
AINSWORTH, IA 52201

Return Service Requested

Center Winter Hours
Mon Thur Fri
8:00 a.m.—4:30 p.m.

Saturday
8:00 a.m.—4:00 p.m.

Sunday
1:00 p.m. - 5:00 p.m.

Emerald Ash Borer Update

With the emerald ash borer confirmed in the nearby counties of Jefferson and Des Moines Counties, as well as Cedar and Allamakee, it is only a matter of time before this pest makes it to Washington County. That is, if it is not already here.

The State of Iowa has taken action. The eastern twenty-five counties, including Washington, are under quarantine. This quarantine includes all living or dead ash trees, the ash borer itself at any life stage, ash firewood, and firewood and wood chips from any deciduous (or hardwood) tree.

Those materials covered under the quarantine cannot be transported to areas not under quarantine unless specific conditions are met. These conditions include the materials in questions being certified by the **USDA** or **IDALS**. In other words, if you purchase firewood in western Iowa



that was harvested in eastern Iowa, there should be documentation that state required precautions were taken to prevent the borer traveling with that firewood.

In addition, the same materials may only travel through the quarantine area provided that necessary precautions are taken to not attract the ash borer while passing through (such as covering up the wood and no unnecessary stops).

Over 3 million ash trees live in our cities and 52 million within our woodlands. We all need to do what we can to prevent the spread of this pest. A feasible and/or successful treatment has yet to be discovered for areas already infested.