

Conservation Matters

Quarterly Newsletter of the Mills County Conservation Board
Spring 2011

Camp Neyati

It is with a heavy heart that we say the following: Camp Neyati, the 280 acre Girl Scout camp north of Glenwood, was recently sold to a buyer other than the Mills County Conservation Board. At this time, we do not know the future or intentions for the site by the buyer.

At the time of the sale notification, the MCCB had several grants being considered for funding by grant letting organizations (results due back to us in April), as well as site visits planned with several possible contributors. Unfortunately, we were just not able to make this project work out in our favor.

Meet Your *WILD* Mills County Neighbors!

The Loess Hills of Western / Southwestern Iowa are one of Iowa's 5 significant natural regions. Loess can be found all over the world, however the loess (luss) landform is significant in the fact that this feature of concentrated loess is known to exist in only 2 places in the entire world, here and China.

Loess is a windblown material of light and yellowish-gray clay like sediment that is gritty in texture composed of silt sized particles of quartz, feldspars and mica.

During glacial periods, glaciers would grind bedrock into the fine silt that composes the Loess. When the glaciers would recede, the melt water flowed into the Missouri River system, carrying some of the silt with it. The ancient Missouri River would have been a braided mass, stretching approximately 2 miles across or more. During dry periods or the winter months, the exposure to the sunlight and the wind would cause the material to dry out and the material would become airborne in the breeze. When the winds (from the west) came across the braided Missouri River, they carried some of the silt load with it. Upon reaching the eastern banks of the river, the winds would become slightly obstructed, and the turbulence would cause the heavier portions of silt to be deposited right away forming the western edge of the Loess Hills, while the lighter portions of silt would be carried a greater distance to the east. It took a very long time for our spectacular Loess Hills, a woodland and grassland area totaling more than 640,000 acres, to form via this method.

The Loess Hills are comprised of three primary layers. The oldest is the Loveland Loess (120,000-159,000 years old) which is highly eroded due to its longer exposure to the elements. The Pisgah loess deposit is between 25,000 and 31,000 years old and the Peoria loess is between 12,500 and 25,000 years old. The Peoria loess makes up the bulk of the present Hills.

More than a half million people visit this region of Iowa each year. This area is home to many rare plant and animal species and communities. Through past years there has been a move to preserve as much of the region as possible through national, regional and local means. In most cases the areas targeted for preservation are prairie remnants, with the highest concentrations of rare native plants and animal inhabitants.

Private landowners are a great asset in the effort to preserve our natural landforms and resources. Many landowners enroll in Conservation Easement programs that allow them to permanently preserve the natural habitat located on the properties.

One example is The Nature Conservancy's purchase of Folsom Point Prairie, a 280-acre high quality prairie remnant in northwestern Mills County. The efforts included the removal of cedar trees on this property as well as prairie burns to rejuvenate and enhance the prairie. Before being acquired by the Nature Conservancy, FPP was a site used to get fill dirt for the construction of the Bunge Industrial Plant to the north. Removal of the loess soil and its use as fill dirt has become quite a concern because of several reasons: a) It significantly alters the landscape b) It is highly erodible c) It is unstable as fill.

If you cruise around Mills county, you can see areas where the hills along the roadsides were cut at angles during construction of roads and buildings, which is a large contributor to the soil shift (mud slides) seen after a strong rain. When the loess is cut at an angle, it allows channels to form, which can lead to undercutting and frequently leads to heavier silt loads in the runoff to ditches and streams. However, when the loess is cut vertically, with no angle, it remains fairly stable and does not appear to sustain any significant erosion during heavy rains.

These hills have been here, comprised of loess, for a very long time. The most significant changes taking place in this region are due to man. We cut timber, create fields, build roads and we have only really started to see our impact upon this fragile landform. Before the arrival of settlers in this region, this area was comprised of tall prairie grasses and forbs, and various tree species. The tall grass prairie species native to this area were responsible for the stability of the soils and the regions landforms. Their root systems, instead of creating mats of roots in the upper 5 inches of soil like many of our "replacements", actually struck deep into the soil, many over 5 feet deep, and helped to hold everything in place.

Long ago, roughly circa 900 - 1300 AD, there were residents in the Glenwood region of Mills County. Today we refer to these people as the Glenwood Culture of the Nebraska Phase, of the Central Plains Tradition. These people raised crops such as corn, beans and

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squash until the fields became infertile and they would clear another area for a field. In many cases, the people would relocate nearly every 10 years. They would move and build a new earth lodge home and burn the old lodge and sometimes plant crops in that area. Some estimates of the Glenwood Culture populations vary between 300 and 500 people. They resided in the Loess Hills of Mills County from roughly 900 AD – 1300AD, and then disappeared from Iowa's archeological record. It is believed that they migrated northward along the Missouri River into South Dakota, possibly due to climatic change which halted their ability to grow their staple crops. These people may be the ancestors of the Arikara and Pawnee. There are roughly 284-recorded Nebraska Phase sites in Iowa, ninety percent of which occur in the Loess Hills. An astounding 239 of those sites occur in Mills County. The majority of these sites are located on the Keg Creek and Pony Creek drainage areas.

From then on, there is little evidence of human activity in the Loess Hills until the 17th century when French fur traders and missionaries were visiting and claimed the region for France. The French handed the region over to Spain after their loss of the Seven Years War in 1763. The Spanish returned the area to France 37 years later, in 1800. In 1803, the French sold the area to the United States as part of the Louisiana Purchase.

The Loess Hills are home to many of us and are majestic neighbors to many more. As you would come to know your home and neighbors, take some time this spring and learn about and visit the Loess Hills.

MCCB Wish List

We are in need of the following items to complete our collection of pelts representing common mammals found within the state of Iowa. Animal pelts are used in several of our various Environmental Education programs.

Mills County Conservation is currently seeking:

- (1) Badger skull
- (1) Woodchuck skull & hide
- (1) Mink skull
- (1) Coyote pelt
- (1) Opossum (adult) pelt

Equipment:

- (1) 4 to 6 foot wide cultipacker (useable)

Please contact us at (712) 527-9685 if you are willing to donate any of these items to the Mills County Conservation Board. Your assistance, donations and support of Environmental Education programs and

conservation practices in Mills County are greatly appreciated. **Thank you!**

UPCOMING EVENTS

APRIL

4/16/2011 10 AM - 1PM

Festival of the Young Child @ Glenwood YMCA

4/22/2011 - EARTH DAY!

Do something to help the Earth today & everyday!

4/30/ 2011 10 AM - 3PM

Family Nature Day @ Gifford Farms, Bellevue, NE

Come to Gifford Farms in Bellevue, NE to partake in a day of outdoor family fun!

MAY

5/07/2011 10 AM

May Hike @ Pony Creek Park

Pre-registration required.

5/21/2011 10 AM

Bats of Iowa @ Pony Creek Park

Pre-registration required.

JUNE

* Iowa's Free Fishing Days: June 3, 4 & 5 *

6/04/2011 9 AM - Noon

Beginner Fishing @ Mile Hill Lake

Pre-registration is required. Adults are required to remain through duration of program.

6/11/2011 9 AM

Volunteer Day @ Pony Creek Park

Pre-registration required. Call for more details.

To pre-register for these events or to ask questions, please call James at (712) 527-9685. Thank you.

The Mills County Conservation Board is able to accept, in the name of Mills County, any gifts, bequests, contributions and appropriations of money or other personal property for conservation purposes. Your tax-deductible donations, and our grant writing, promote the growth and betterment of our facilities for the enjoyment of the citizens of Mills County and its many visitors.