

Tri-Basin Topics

Summer 2009

"Dedicated to Conservation of our Natural Resources"

Volume 23, Issue 3

Prescribed Burns Maintain, Enhance Grasslands

Tri-Basin NRD personnel helped carry out several prescribed burns this spring, including one at Lake Seldom Wildlife Refuge on the southern edge of Holdrege in late April.

Fire is an important tool for maintaining and enhancing grasslands, and to restore native grasses. Prescribed burns can produce the following benefits: recycle nutrients tied up in old plant growth; control woody plants and herbaceous weeds; improve poor quality forage; increase plant growth; and improve certain wildlife habitat. Periodic burns help keep upland nesting cover used by pheasants, waterfowl and songbirds productive. Cattails and sedges are re-established by an occasional burn.

"Prescribed burning, if properly timed, is a good, natural grassland management tool that reduces the need for herbicide application to control weeds and invasive grasses," said Charles Brooks, Tri-Basin NRD Land Resources Coordinator.

The primary purpose of the prescribed burn of a portion of Lake Seldom was to improve upland and wetland habitat by clearing the area of undesirable plants, such as reed canary grass. The burn will also set back non-native cool season grasses. This will allow more desirable plant species to fill in, providing better habitat for wildlife. The burn will be followed by disking of a portion of the wetland area by Ducks Unlimited. Tri-Basin Natural

Resources District conducted this burn with the assistance of staff from USDA-Natural Resources Conservation Service, Central Nebraska Public Power & Irrigation District and several volunteers.

In mid-April, Tri-Basin NRD staff assisted with a prescribed burn of pasture ground in Gosper County. While the prescribed burn process was the same as the Lake Seldom burn, the goal for the pasture burn was entirely different. The primary purpose of the pasture prescribed burn was to control the eastern redcedars that were invading the pasture. According to Brooks, the Gosper County burn was a success, and a good portion of the redcedars were killed. If you would like to see photos of the prescribed burns and their after-effects, check our website: www.tribasinnr.org.



Alex Hasenauer, Tri-Basin NRD Land Resources Technician, uses a drip torch to start the prescribed burn at Lake Seldom Wildlife Refuge.



Nolan Little, TBNRD Water Resources Technician, ignites strips of pasture grass during a prescribed burn in Gosper County.

<http://www.tribasinnr.org>



Manager's Message

By: John Thorburn

Dividing the Land

Our third president, Thomas Jefferson, was a man of many talents. The author of the Declaration of Independence was not just a lawyer, he was a botanist, architect, philosopher, diplomat and a prolific inventor and designer. Among his inventions were the moldboard plow and the swivel chair. Even though Jefferson never traveled west of the Appalachian Mountains, one of his creations, the Township and Range system of land measurement, had a profound effect on the settlement of the western United States.

Jefferson wanted a more efficient way to divide land than the old "metes and bounds" system that colonists brought with them from England and used to establish land claims in the eastern United States. That system relied on landmarks like trees and rocks to mark property boundaries. Unfortunately, such landmarks were impermanent and subject to disturbance. For this reason, property disputes are common in the east. Jefferson's new system of land description was adopted in the federal Land Law of 1785. Ohio was the first state delineated using the Township and Range system.

The Township and Range system didn't just enable orderly settlement of the states. It also provided the basis for organization of electoral precincts, school districts and counties.

Every grid system has x and y axes. Nebraska surveys started with delineation of the 40th parallel of latitude. Our southern boundary with Kansas is the x axis

or "base line" for survey measurement. Sections are measured east and west from the 6th Principal Meridian, which is the y axis. This North-South line runs through Norfolk and Columbus and forms the part of the boundaries of several eastern Nebraska counties.

Sections are generally a square mile (640 acres), although survey "correction lines" reduce the size of some sections to account for the curvature of the Earth. Sections are numbered 1 through 36 and grouped into squares six miles on a side called townships. Under the original Homestead Act of 1862, settlers were entitled to a quarter-section (160 acres) if they lived on and farmed that land for five years.



Surveyors worked their trade before land was homesteaded. Land surveys of Nebraska began as soon as it was named a territory in 1854. Early surveyors faced many dangers, including blizzards, prairie fires and hostile Indians. The Natives recognized that the surveyors were establishing claims on their territory, so they often pulled survey stakes, stole horses from survey parties and, sometimes even attacked them. The bloodiest such incident occurred near McCook in 1869. Two scouts for the Nelson Buck survey party killed two Oglala Sioux Indians. The Oglala retaliated by massacring all ten members of the survey crew. Skirmishes between Natives and surveyors occurred regularly until the Indians were driven onto reservations in the late 1870s. The last part of Nebraska to be surveyed was

Sheridan County in the northwest Panhandle, which wasn't entirely divided up until 1910.

The next time you are out driving in the countryside, remember that you aren't just driving on any old "mile road". You're driving on one of Thomas Jefferson's inventions. Remember also the sacrifices and suffering of those hardy survey crews who laid out Jefferson's design all across the west.

Nebraska Natives



American Plum is native to Nebraska and is well adapted to a wide variety of soil and climatic conditions. It forms dense thickets ideal for the outside rows of wind-breaks and for wildlife habitat. Birds use the thickets for nesting, feeding, and resting areas. The twigs are a preferred source of browse for deer and rabbits during the winter. White flowers bloom in May, with red to purple plums ripening during September. The earliest ripening fruit is usually the sweetest and makes the best jelly. At maturity, American plum shrubs reach 5 to 8 feet.

Brown spot, plum pocket and tent caterpillars can cause some problems.



TBNRD Office to Move

Tri-Basin Natural Resources District will be moving to its newly renovated office building effective July 1, 2009. Phelps County Weed Control will operate from the new location, as well. The district's phone number, fax number, website and email addresses will remain the same. Tri-Basin NRD's contact information follows:

Tri-Basin NRD
1723 North Burlington
Holdrege, NE 68949
(308) 995-6688 or 1-877-995-6688
www.tribasinnrd.org
tribasin@tribasinnrd.org

Water Samples Required for Nitrogen Management Reports

Producers with ground in Phase 2 or Phase 3 of the Groundwater Quality Management Area are reminded that water samples are required on all wells that are used. Even if a producer's agronomist takes soil samples and completes the Nitrogen Management forms, the owner or operator of the ground is responsible for taking water samples and reporting the results. Water sample bottles are available at the Tri-Basin NRD office. For more information on the Phase 2 and Phase 3 areas, call the Tri-Basin NRD office at 308-995-6688 or 1-877-995-6688.

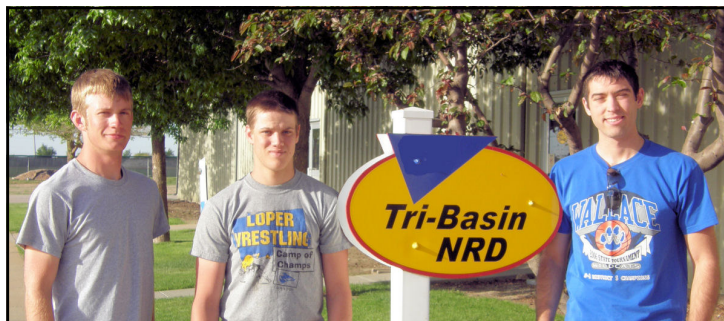
Tri-Basin NRD Hires Summer Interns

Tri-Basin NRD will have three summer interns assisting with various projects throughout the summer, including water sampling, weed spraying and IPA maintenance.

Philip Lempke is beginning his second summer as an intern at Tri-Basin NRD. Philip is from Wallace, Nebraska. He attends the University of Nebraska-Kearney, majoring in computer science, with a minor in mathematics. His hobbies include sports, computers and music.

Zach Starks from Haigler, Nebraska. He is studying criminal justice and biology at the University of Nebraska-Kearney. Zach enjoys sports, hunting and fishing.

Erik Anderjaska of Hayes Center is a civil engineering student at the University of Nebraska-Omaha. His interests include motorcycles and outdoors activities, such as hunting, fishing and canoeing.

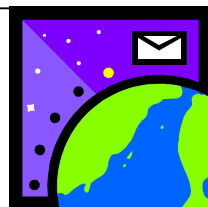


Erik Anderjaska, Zach Starks and Philip Lempke are Tri-Basin NRD's summer interns.

Don't forget to schedule your chemigation inspections!
Call Tri-Basin NRD
at 1-877-995-6688.

Electronic Edition of Tri-Basin Topics Available

If you are interested in receiving a PDF version of Tri-Basin Topics newsletter via e-mail, please let us know. Simply send an email to nsalisbury@tribasinnrd.org requesting the electronic version and we'll take you off the mailing list and add you to the e-mail edition list.



ONLINE RESOURCES

<http://dnrdata.dnr.ne.gov/wellssql/?&>Dept. of Natural Resources Well Data
<http://water.usgs.gov/ogw> Ground water information
http://www.cnppid.com/Elevation_Flows2.htm Reservoir elevation/Platte River Flow
<http://tribasinnrd.org/domesticwatertest.html> Domestic Nitrate Testing
<http://www.arborday.org> Tree recommendations, identification
<http://www.websoilsurvey.nrcs.usda.gov/app/> Determining soil type
http://water.usgs.gov/cgi-bin/daily_flow?ne Current water resource conditions for Nebraska

CALENDAR OF EVENTS

(All meetings are at NRD office in Phelps County Ag Center unless otherwise noted.)

July

July 3.....Office closed for Independence Day
 July 14.....NRD Board Meeting at 1:30 p.m.*
 July 18-23Kearney County Fair
 July 25-30Phelps County Fair
 July 30-August 1Gosper County Fair

August

August 11.....NRD Board Meeting 1:30 p.m.*

September

September 7Office closed for Labor Day
 September 8NRD Board Meeting at 7:30 p.m.*

* Times are tentative

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 Carie Lynch.....Administrative Secretary
 Nolan Little.....Water Resources Technician
 Alex Hasenauer.....Land Resources Technician
 Tammy Fahrenbruch.....Office Manager
 Esther Smith.....Office Clerk
 Nicole Salisbury.....Information & Education Coordinator
 Patty Abrahamson.....Assistant Office Clerk
 Ruth Nielsen.....Minden Office Secretary
 Lori Hagan.....Elwood Office Secretary
 Tami Reese.....Holdrege Office Secretary

A mailing list is maintained and requests to be placed on the list should be sent to the above address. Comments and suggestions may be addressed to the General Manager.

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WATER CONSERVATION TIP

Collect water from your roof to water
 your garden or outdoor plants.



♦ Summer Interns Hired
 ♦ New TBNRD Office
 ♦ Prescribed Burns
IN THIS ISSUE

RETURN SERVICE REQUESTED

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1723 N Burlington Street
Holdrege, NE 68949



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