

# Tri-Basin Topics

Summer 2007

*"Dedicated to the Conservation of our Natural Resources"*

Volume 21, Issue 3

## Tri-Basin Irrigators Use Water Wisely

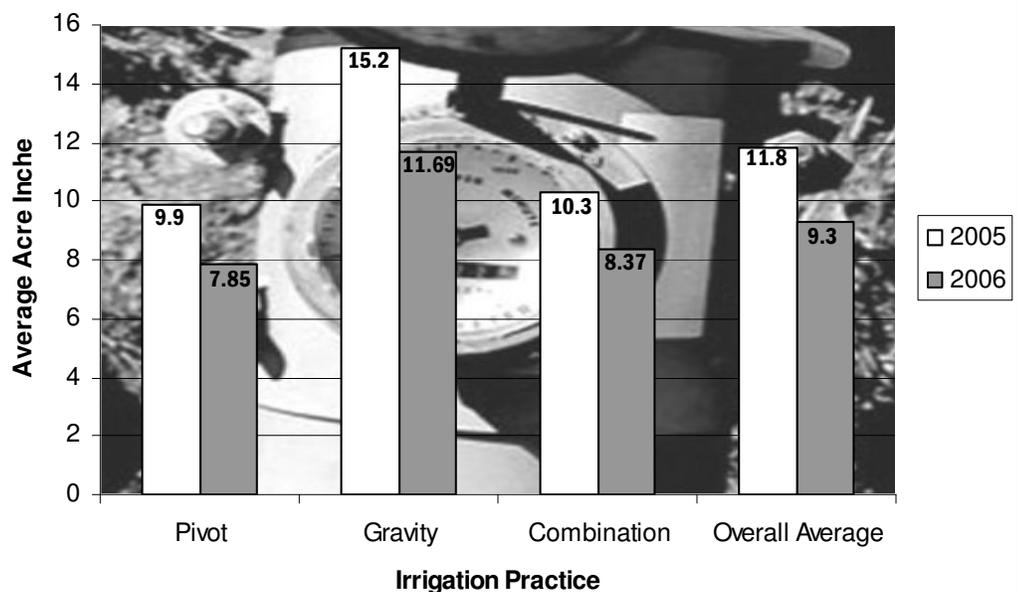
Irrigators in the Republican Basin portion of Tri-Basin NRD used less irrigation water in 2006 than in 2005, according to flowmeter data submitted to Tri-Basin NRD by farmers and verified by NRD personnel. Overall average water use in this portion of the district was 9.54 inches of water per acre in 2006, versus 11.8 inches per acre in 2005. Water use in all sub-categories also declined in 2006, when compared to 2005. This reduction in water use is due to several factors: 1) continued conversion of gravity-irrigated land from gravity to pivot irrigation methods, 2) increased attention by farmers to soil water content and utilization of irrigation scheduling practices that insure irrigation water is applied only when it is needed, and 3) rotating lower water use crops like wheat onto fields that had previously grown continuous corn. Wet weather in August, 2006 reduced irrigation demand late in the season, but May and June, 2006 were extremely dry, so the irrigation season was "front loaded" last year. Irrigation water use data is shown in detail below.

We at Tri-Basin NRD are very proud of our farmers and their voluntary efforts to conserve groundwater by using it as efficiently as possible. Average water use by our irrigators is far less than allocation limits established by neighboring Lower Republican NRD (11" per acre per year east of Highway 183 and 12" per acre west of Highway 183). Wise use of groundwater reduces the likelihood that this NRD will need to allocate water to protect our groundwater supplies. It also helps protect our state from liability to Kansas for overuse of basin water supplies. Good job, folks. Keep up the good work in 2007!

### TBNRD and NRCS Combine Water Use Forms

Producers who have EQIP contracts and are required to report water use to Tri-Basin NRD will be receiving a combined 2007 Water Use Reporting form this year, instead of receiving a water use report from each agency separately. The data from this form will then be used by both agencies. These reports will be mailed out at the beginning of the irrigation season and are due by November 30, 2007. Anyone with questions about this change can call the Tri-Basin NRD office at 308-995-6688 or 1-877-995-6688 or Curtis at the NRCS office at 308-995-6121.

Republican Basin Water Use Results



\*This report is produced by Tri-Basin NRD from landowner reports and data collected by NRD staff. We do not estimate gallons used on meters that did not work. We also do not include incomplete reports or questionable data.

<http://www.tribasinprd.org>

# "Mower Blight" Deadly to Trees

by Noel Mues, Furnas County Extension Educator

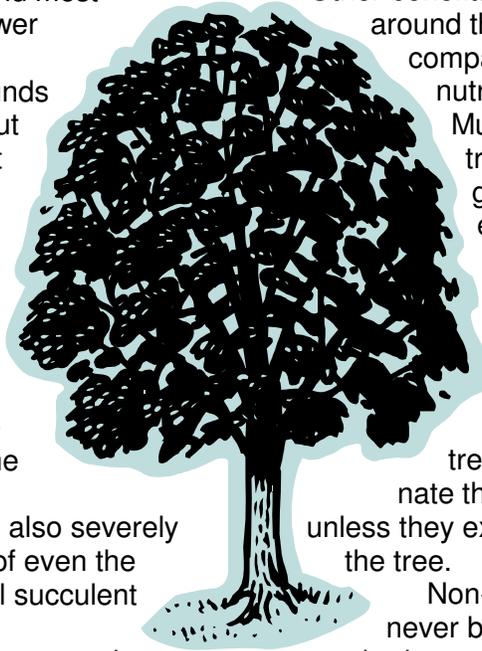
Green-up time in the spring focuses attention on potential insect and disease problems of trees. However, we as homeowners and yard tenders may be guilty of causing some of the worst and most needless damage to trees – lawnmower damage or "mower blight".

Symptoms of mower blight are wounds of varying size on a tree trunk at about mower height and lack of normal root flare at the base of a tree. This can lead to overall tree decline, including crown dieback, stem rot and leaf drop.

Many people think that a tree's bark protects it from small bumps and scrapes. This is true to a point, but a tree's living, growing tissue, the cambium layer, is right underneath the bark and is easily damaged.

Grass trimmers ("weed whips") can also severely damage tree trunks. The nylon cord of even the smallest of these tools can quickly kill succulent tissue below the bark.

The best approach to preventing mower and weed whip blight is to mulch around a tree. A four inch depth of organic mulch, such as wood chips, bark or pine needles should be used rather than rocks or plastic. Distribute the mulch for several feet around the tree. The wider the mulch area, the better.



Mulch will keep grass from growing next to trees. Grass competes with trees for water and nutrients. Mulch also keeps lawn mowers away from tree trunks.

Other benefits from mulch include: it keeps the soil around the tree roots cool and moist, reduces compaction, and adds organic matter and nutrients to the soil as the mulch decays. Mulching also reduces conflict between tree roots and mowers. These are good reasons to mulch around a tree even if you are careful with the mower.

Many tree species, such as silver maple, have roots that emerge from the soil over time and become a nuisance. If these roots are cut and removed to allow easier mowing, the tree will be stressed. Mulching will eliminate the need for removing these roots unless they extend a considerable distance from the tree.

Non-permeable plastic sheeting should never be used as mulch under trees or shrubs and should not be placed under a bed of chips or rocks. Roots need oxygen that enters the soil from the air above. Plastic sheeting prevents oxygen from entering the soil, causing root suffocation and eventual decline of the tree.

## DNR: Register Irrigation Pits as Wells

LB 701 became effective on May 2, 2007. One of the provisions of this legislation was the requirement that all pits that intercept the ground water and which are used for purposes of irrigation must be registered with the Department of Natural Resources as a ground water well. The new law requires registration of existing irrigation pits within 180 days after May 2, 2007.

Ground water pits that must be registered as ground water wells include any excavation made for any purpose if ground water flows into the excavation under natural pressure and a pump or other device is placed in the excavation for the purpose of withdrawing water from the excavation for irrigation. For such excavations, construction means placing a pump or other device into the excavation for the purpose of withdrawing water for irrigation.

Reuse pits that receive water off the overlying land and do not intercept the ground water table, are not

required to be registered as wells. Anyone having questions about whether their pit is subject to registration should contact Tri-Basin NRD at 308-995-6688 or 1-877-995-6688.

The owner of the ground water pit is responsible for registering such pit with the Department of Natural Resources. Forms for registration are available in the Department's offices or at their website at [dnr.ne.gov](http://dnr.ne.gov).

Owners of ground water pits within Tri-Basin NRD must contact the NRD prior to registration of the pit as a ground water well with the Department of Natural Resources. The NRD staff must sign the registration form or submit a Water Well Registration Natural Resources District Approval form to show that such pit and the irrigation from the pit is in accordance with rules and regulations of the NRD. This certification is required prior to registration of the pit as a ground water well in the Department.

# Tri-Basin Welcomes New Secretaries



Tina Bergmann has joined our staff as the Elwood Field Office Secretary. Tina lives in Elwood with her husband, Jeff, and their children Jake, 13, Garrett, 12, Wyatt, 8 and Jordyn, 6.

Tina enjoys spending time with her family, including taking family bike rides. She also likes to refinish antique furniture and scrapbooking. Tina says she is very

excited about her new job, so stop in sometime and welcome her to the Elwood Field Office.



Ruth Nielsen is the new Field Office Secretary in Minden. She and her husband Michael live in Minden with their children Alyssa, 17, Sarah, 15 and Rachael, 14.

Ruth is a member of Bethany Lutheran Church in Minden where she is active in the Adult Choir and is the Youth Club choir director. She is also a member

of the Minden Community Players and the Summer Honors Program Alumni Association.

Ruth is kept busy following her children's activities, but also enjoys watching movies and reading.

## Flowmeter Tips & Reminders

As producers begin the busy irrigation season this summer, there are some important tips about flowmeters to keep in mind.

The ending meter reading you submit each fall is entered into our database and automatically used as the beginning reading for that meter the following spring. Several things can happen to meters in the off-season, such as removing a meter from the pipe and allowing it to spin in the wind, which can affect the meter reading. Therefore, producers should check the meter reading at the beginning of the irrigation season to make sure it is the same as the ending reading from last fall. If the meter reading is different, the new number needs to be reported to the Tri-Basin NRD office so that water use can be accurately calculated. Producers who remove meters for the winter should also be careful to put each meter back in the same location to avoid meter reading discrepancies.

Prolonged exposure to sun and rain can damage the dial of a flowmeter. Producers are encouraged to keep the original meter lid or a cover over the dial to prevent damage.

Tri-Basin NRD rules state that anyone who unintentionally damages a flowmeter or notices that a meter is malfunctioning or inoperable must report the condition of the meter to the Tri-Basin NRD office within 72 hours of the discovery.

Anyone who has questions about flowmeter readings or regulations should call the Tri-Basin NRD office at 995-6688 or 1-877-995-6688.



## Bruning Visits Water Jamboree

Attorney General Jon Bruning visited the 15th annual Water Jamboree held at Harlan County Reservoir on April 26. Bruning presented the Water Jamboree Committee with a check for \$3000 in support of educating students about the importance of water resources. Bruning and his children, Jack and Lauren, also observed some of the Water Jamboree activities. Pictured are (left to right): Jack Bruning; Lauren Bruning; John Thorburn, Tri-Basin NRD General Manager; Attorney General Jon Bruning and Linda Dannehl, University of Nebraska Extension Educator.

## It's a Girl!



Congratulations to Tri-Basin NRD director Ed Harris and wife, Becky, on the birth of their daughter, Sydney Lynne. Sydney was born on May 24, 2007. She weighed 6 pounds, 14 ounces and was 19 inches long.

## 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](http://www.cnppid.com/Elevation_Flows2.htm) .....Reservoir elevation/Platte River Flow
- <http://tribasinprd.org/domesticwatertest.html> ..... Domestic Nitrate Testing
- <http://www.arboday.org> ..... Tree recommendations, identification
- <http://www.websoilsurvey.nrcs.usda.gov/app/> ..... Determining soil type
- [http://water.usgs.gov/cgi-bin/daily\\_flow?ne](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 4 - Independence Day (office closed)
- July 10 - NRD Board Meeting at 1:30 p.m.\*

## August

- August 14 - NRD Board of Directors Tour with Meeting at 1:30 p.m.\*

## September

- September 3 - Labor Day (office closed)
- September 11 - NRD Board Meeting at 7:30 p.m.\*

\* Times are tentative

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### TRI-BASIN NRD STAFF

John Thorburn.....General Manager  
Richard Holloway.....Assistant Manager  
Charles Brooks.....Land Resources Coordinator  
Carie Lynch.....Administrative Secretary  
Roger David.....Conservation Technician  
Steve Nelson.....Land Resource Technician  
Tammy Fahrenbruch.....Office Manager  
Esther Smith.....Office Clerk  
Nicole Salisbury.....Office Assistant  
Ruth Nielsen.....Minden Office Secretary  
Tina Bergmann.....Elwood Office Secretary  
Patty Abrahamson.....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.

### TRI-BASIN NRD BOARD OF DIRECTORS

Brad Lundeen, Chairman Wilcox, NE	Dick Helms Arapahoe, NE
Phyllis Johnson, Vice Chairman Bertrand, NE	David Nelson Upland, NE
Todd Garrelts, Treasurer Holdrege, NE	David Nickel Kearney, NE
David Olsen, Secretary Minden, NE	David Raffety Kearney, NE
Brian Bergstrom Axtell, NE	Larry Reynolds Lexington, NE
Harold D. Erickson Holdrege, NE	Ray Winz Holdrege, NE
Ed Harris Loomis, NE	

## WATER CONSERVATION TIP

Keep your shower under five minutes and you'll save up to 1,000 gallons of water a month.



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RETURN SERVICE REQUESTED

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*Natural Resources District*



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