



# Insider

USDA

Natural Resources Conservation Service

April — May 2010

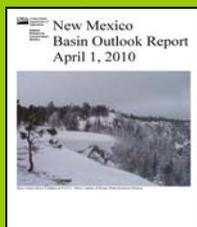
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## A Conservation Legacy Reaching Back to 1935

2010 marks the 75th anniversary of the Natural Resources Conservation Service (NRCS) and the beginning of the federal commitment to conserving natural re-

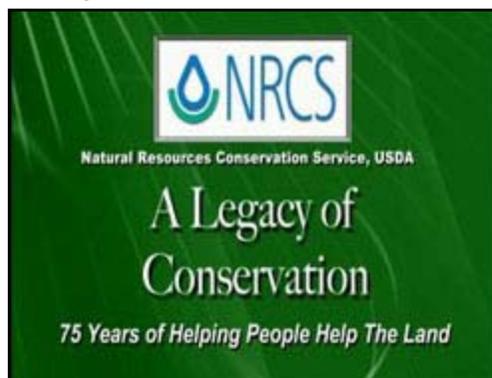
sources on private lands. Originally established by Congress in 1935 as the Soil Conservation Service (SCS), NRCS has expanded to be-

come a conserva- tion leader for all natural resources, en- suring private lands are conserved, re- stored, and more resilient to environ- mental challenges, like climate change.

Seventy percent of the land in the United States is privately owned, making stew- ardship by private landowners absolutely critical to the health of our Nation's envi- ronment.

NRCS works with landowners through conservation planning and assistance

designed to benefit the soil, water, air, plants, and animals that result in produc- tive lands and healthy ecosystems.



Science and technology are critical to good conservation. NRCS ex- perts from many disci- plines come together to help landowners con- serve natural resources in efficient, smart and sustainable ways.

Whether developed in a laboratory or on the land, NRCS science and technology helps landowners make the right deci- sions for every natural resource. NRCS succeeds through partnerships, working closely with individual farmers and ranch- ers, landowners, local conservation dis- tricts, government agencies, Tribes, Earth Team volunteers and many other people and groups that care about the quality of America's natural resources.

## NM State Conservationist Dennis Alexander

# State Conservationist's Notes

April is a month that generally means the start of new activity, such as Spring. This is a time to celebrate our past, present and future.

April 27<sup>th</sup> marked the 75<sup>th</sup> Anniversary of what we know today to be the Natural Resources Conservation Service. The agency was originally called the Soil Conservation Service (SCS). While NRCS evolved through the years to include more technical assistance, it never lost its purpose of finding new methods of preserving and improving the soil and water resources of this country.

In many aspects, we, the employees of the NRCS New Mexico consider ourselves quite fortunate to have the opportunity to assist private landowners make the most of their natural resources. While there may be natural barriers and man-made fences that separate landowners from one another, our job stretches well beyond that. We really do have a terrific mission – “Helping People Help the Land.”

We recently brought onboard Rey Adame, our NRCS New Mexico Public Affairs Officer, replacing Barbara Garrett, who retired. Rey has been a public affairs specialist with the U.S. Air Force, U.S. Army Special Operations Command, BLM in Wyoming, and U.S. Forest Service.

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*In the words of the first NRCS Chief, Hugh Hammond Bennett –  
“If we take care of the land, it will  
take care of us.”*

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He also taught at the University of North Carolina and North Carolina State University before joining us at NRCS. He has more than 30 years experience working with local, state, national, international broadcast and print media as well as community relations. He will be visiting numerous NRCS sites in the next few months. He is looking forward to meeting and working with you. Rey brings a tremendous amount of experience and energy to our public affairs position and will bring a fresh perspective to our program.

I am very proud of the work each of you do for the NRCS New Mexico. We want to tell our story to as many people as possible. It should be told.

People should know that we have some of the best people working right here in New Mexico who I consider to be very knowledgeable, and in some cases, experts in their respective fields of work.

*NRCS New Mexico*

## State team participates in National American Indian Science and Engineering Fair

The Natural Resources Conservation Service was a major sponsor at the 2010 National American Indian Science and Engineering Fair (NAISEF) held in March. The Fair took place at the Albuquerque Convention Center in Albuquerque.

This learning event was hosted by the American Indian Science and Engineering Society, a nonprofit organization whose mission is to increase substantially the representation of American Indian and Alaskan Natives in engineering, science and other related technology disciplines.

Volunteer judges from NRCS, along with other organizations, judged approximately 216 science projects that included subject disciplines in the areas of engineering, animal science, plant science, environmental science, and earth science.

This year, more than 258 participants in grades 5-12 attended the three-day event. The Fair offered a science expo, hands-on activities, student competitions and presentations.

The annual NAISEF is an opportunity for American Indian/Alaska



Among the New Mexico NRCS employees on hand to support the NAISEF event were: Fernando Morales, Engineer, NRCS NM State Office; Seth Fiedler, Resource Conservationist, NRCS NM State Office; Cliff Sanchez, Assistant State Conservationist-Water Resources, State Office; John Tunberg, State Range Management Specialist, State Office; Carol Couch, District Conservationist in Oklahoma; Nathaniel Todea, State Hydrologist, Salt Lake City, Utah; and Thomas Gonzales, District Conservationist, Espanola Service Center.

Native students to actively participate in a science-based learning environment and create science projects that can be shared with peers, teachers, and educators.

The AISES Annual National Conference is the nation's foremost event for American Indian and Alaska Native students pursuing

studies in science, engineering, and technology fields.

The three-day event included a Career Fair, dynamic nationally recognized speakers, panel discussions, and workshops for students, teachers, and professionals.

The 2011 AISES National Conference is scheduled for November.



How to contact NRCS N.M.:  
State Office (505) 761-4400

- ◆ NW Area Office (505) 761-4447
- ◆ South Area Office (575) 648-2941
- ◆ East Area Office (575) 762-4769

◆ NRCS - NM Public Affairs Officer  
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# House panel begins talks on FY 2012 farm bill

*With some of the largest federal spending for conservation on private lands, the farm bill is crucial for wildlife habitat and the environment.*

*"What I've told people is that they should put everything on the table and we'll look at it..." — U.S. Rep. Collin Peterson, (D-Minn.)*

For House Agriculture Chairman Collin Peterson (D-Minn.), it's never too early to start thinking about the next farm bill.

Less than two years after Congress finished the last farm bill, Peterson plans to launch a series of hearings this week to discuss the 2012 farm bill.

Congress takes up the massive farm bill every five years. The sweeping measure oversees upward of \$200 billion in mandatory spending for crop subsidies, food aid, farmland energy projects and conservation programs that pay landowners to set aside land, improve wildlife habitat or grow alternative energy crops.

With some of the largest federal spending for conservation on private lands, the farm bill is crucial for wildlife habitat and the environment. Its broad swath of mandatory spending programs attracts interest from a variety of advocacy

groups and lobbyists.

The House Agriculture Committee will launch its work on the next farm bill in late April, after holding a hearing Wednesday with Agriculture Secretary Tom Vilsack. Two weeks later the committee will hear recommendations for the new



farm bill from a panel of experts, academics and economists.

Peterson identified crop insurance and cotton subsidies as key issues in the next farm bill. Overall, he said he has no "rigid agenda" and has not yet decided what sort of significant changes he might make in the bill. He said he wants to be open to a range of ideas -- possibly even changing the long-held, controversial direct

payments program, which pays farmers regardless of crop or sales price.

"What I've told people is that they should put everything on the table and we'll look at it," Peterson told reporters. "I think it's a useful exercise to take a look at how we're doing, and does it make sense for the future?" One challenge for the next bill will be the growing demand for nutrition and conservation programs in the face of what is expected to be a tight budget.

In the 2008 farm bill, the Agriculture Committee got an extra infusion of cash from

changes in tax programs that were made in the Ways and Means Committee. Negotiations over the funding schemes added a new element to the debate of the bill.

For the next bill, Peterson said he does not want to seek extra funding from other panels -- which could add to the strain of trying to fit programs into what could be a shrinking baseline. "It's going to be a baseline **(See Farm Bill, Page 5)**

## NRCS Snow Survey program hosts Annual Rio Grande Runoff Meeting

The New Mexico NRCS Snow Survey program hosted the 24<sup>th</sup> annual Rio Grande Runoff Meeting in Santa Fe, April 13-14. The runoff meeting is designed to compare the NRCS forecasted outlook from the current will the actual data collected.

The meeting started with a tour of the new Buckman Direct Diversion Project. This project will divert and treat water from the Rio Grande for consumptive use in Santa Fe. The tour included the diversion structure and heavy sediment removal facility, pumping stations, and final water treatment plant.

This facility, once online in 2011, will use up to 8,730 acre-feet of water from the Rio Grande and San Juan-Chama diversion annually. This makes

the accuracy and timeliness of the NRCS New Mexico Basin Outlook Report even more critical in future years.

Water managers and users met with the NRCS and NOAA staff responsible for forecasting and publishing runoff estimates from snowpack. Topics of discussion included the 2010 snowpack conditions and runoff forecasts, 2009 runoff forecasts reviews and verifications, 2010 precipitation and long range forecasts, stream flow conditions, and reservoir operations.

This meeting is unique in that it brings multiple agencies together to discuss water management and operations, along with forecasts for future operations based on expected flows.

If you would like more information, contact Wayne Sleep, NRCS NM Snow Survey office, at (505) 761-4431.

## Corn Silage Variety Trials in Artesia

Every year NMSU, in cooperation with local and national seed companies conducts variety-trials all over the state of New Mexico for many different types of crops.

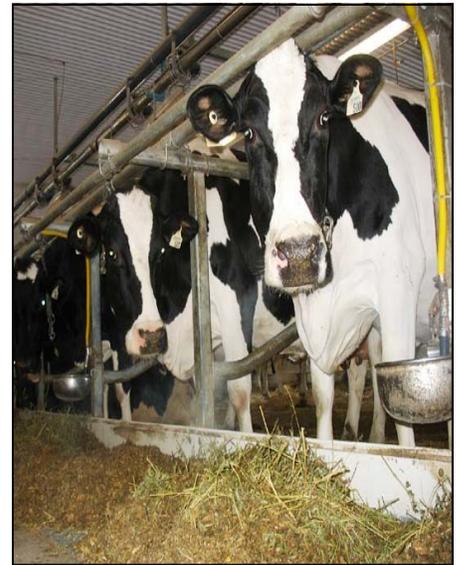
The NMSU Agricultural Science Center in Artesia is the closest experimental station to the Roswell area. The science center shares the same climate and rain-

fall averages as Roswell, making it an ideal location to gain information for variety trails. The newest report (2008) has been released for corn silage.

Included in this issue is a copy of the results. The two highlighted sections represent the highest yielding seed varieties.

The full report, over 60 pages, can be accessed at [nmsu.edu](http://nmsu.edu).

The full report contains results from other parts of the state.



## Farm Bill ... continued from Page 4

bill; we're not going to look for any help from other committees in that part of the process -- that is part of what complicated the last bill," Peterson said. "It's not going to be easy, that is one reason we are starting early, so we can have people look at where we're going, look at trends in the baseline and get back to us with ideas about what we can do with the resources we have."

Although Peterson is launching the hearings now, the membership and leadership of the House and

Senate Agriculture committees could change significantly before it is time for lawmakers to work in earnest on the bill. Nevertheless, the House Agriculture Committee has often started work on the farm bill well in advance. For instance, the House panel held hearings nearly two years before the 2008 farm bill. Those initial hearings started under the Republican leadership of Rep. Bob Goodlatte (R-Va.), who had to hand leadership of the farm bill over to Peterson when the Democrats took control of Congress in 2007.

# Conduct proper testing of soil to gauge Nitrogen fertilization levels

Discussing the topic of nitrogen fertilization can be quite tricky because nitrogen has such a complex system of interactions and transformations. Asking your local Agricultural Extension agent about fertilization rates may leave you more confused than before you asked the question. To make things a bit simpler just remember a few general rules that apply to all cropping situations:

First, Nitrogen that is available to plants comes from many different sources and it is important to balance what nitrogen is being applied and what nitrogen already exists in the soil.

Nitrogen comes from organic matter in the soil, animal manure, inorganic fertilizers, irrigation water and legume crops, such as alfalfa and clover. Each of these sources has a different characteristic:

Soil organic matter releases only 20 - 30lbs of N a year during the growing season

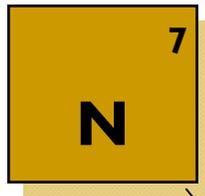
Animal manure releases only 30% of its N during the growing season

Inorganic fertilizers (Urea, Ammonia, etc.) lose between 20 – 50 % of their nitrogen to leaching, volatilization, run-off

Irrigation water from shallow wells often times contains a substantial amount of nitrogen

Legume crops from the previous crop only adds nitrogen if the entire biomass (stems, leaves, roots) are incorporated into the soil.

In order for farmers to know what already exists in the soil, they need to get their soil tested for the basic plant nutrients (N-P-K) at least once a year. Soil testing is critical! Without knowing what the soil has in it, it is very difficult to calculate how much more nitrogen to add. Soil testing facilities often return their tests with fertilizer recommendations, which take into account the amount of N already present in the soil.



A soil sample to the depth of at least two

feet is your best way of seeing what will be available to the corn plant during its growing season.

Secondly, keep good records.

The proper balance of nitrogen is a complex process. It is vital to keep good records of soil tests, organic and inorganic fertilizer inputs, crop rotations and yield amounts. By un-

derstanding the nutrient balance required in each cropping system a farmer can make well educated estimates on how much nitrogen will be needed to grow a productive, high yielding crop.

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*“Nitrogen that is available to plants comes from many different sources. It is important to balance what nitrogen is being applied and what nitrogen already exists in the soil.”*

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Periodic Table of the Elements

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1 H																	2 He																												
3 Li	4 Be											5 B	6 C	7 N	8 O	9 F	10 Ne																												
11 Na	12 Mg											13 Al	14 Si	15 P	16 S	17 Cl	18 Ar																												
19 K	20 Ca	21 Sc	22 Ti	23 V	24 Cr	25 Mn	26 Fe	27 Co	28 Ni	29 Cu	30 Zn	31 Ga	32 Ge	33 As	34 Se	35 Br	36 Kr																												
37 Rb	38 Sr	39 Y	40 Zr	41 Nb	42 Mo	43 Tc	44 Ru	45 Rh	46 Pd	47 Ag	48 Cd	49 In	50 Sn	51 Sb	52 Te	53 I	54 Xe																												
55 Cs	56 Ba	57 La	72 Hf	73 Ta	74 W	75 Re	76 Os	77 Ir	78 Pt	79 Au	80 Hg	81 Tl	82 Pb	83 Bi	84 Po	85 At	86 Rn																												
87 Fr	88 Ra	89 Ac	104 Unq	105 Unp	106 Unh	107 Uns	108 Uno	109 Une	110 Uun																																				
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58 Ce	59 Pr	60 Nd	61 Pm	62 Sm	63 Eu	64 Gd	65 Tb	66 Dy	67 Ho	68 Er	69 Tm	70 Yb	71 Lu																																
90 Th	91 Pa	92 U	93 Np	94 Pu	95 Am	96 Cm	97 Bk	98 Cf	99 Es	100 Fm	101 Md	102 No	103 Lr																																

Legend:

- hydrogen (green)
- alkali metals (yellow)
- alkali earth metals (light blue)
- transition metals (orange)
- poor metals (dark blue)
- nonmetals (light grey)
- noble gases (red)
- rare earth metals (dark grey)



New Mexico State University (NMSU) Valencia County Cooperation Extension Service hosted a Hoop House construction workshop in early April at Hays Honey Farm, Bosque Farms. Del Jimenez, Rural Agricultural Improvement and Public Affairs Project (RAIPAP) Extension Agricultural Specialist at NMSU, conducted the training session. Seasonal high tunnel systems offer an option to extend the growing season in many areas of New Mexico to successfully produce vegetable and other specialty crops for personal or commercial use. There were about 45 participants from the local community and some represented the agricultural sector. Among the attendees were Madeline Miller of Valencia Soil and Water Conservation District, April Luna, Farm Bill Specialist and Pearl Armijo, Los Lunas NRCS Service Center

District Conservationist. Most of the participants wanted to learn how to build a hoop house for their personal use. All the attendees assisted in the construction of this “straight frame” 500 square-foot hoop house. The material used for



this type of hoop house can be bought at local hardware stores for \$800 to \$1000. Valencia County Extension Agent Kyle Tator provided participants with construction material details along with copies of material cost estimates. NRCS-New Mexico staff was available to

# How to build a ‘Hoop House’

discuss potential cost share program information to attendees interested in planning and implementing this type conservation practice.

“A hoop house this size would take about a day and a half to two days to complete,” said Jimenez. The NMSU Extension Service has been involved in constructing several hoop houses around the state and is currently researching the life span of the different styles and material used.

According to Jimenez, “a typical hoop house should last about seven years, but there is a hoop house in New Mexico that is 12 years old.” The weather is a major factor in the longevity of a hoop house.

If you want to construct a hoop house, the Cooperative Extension Service website at: <http://cahedev.nmsu.edu/pubs/circulars/CR-606.pdf>.

## 2007 National Resources Inventory

# Soil erosion drops, with rise in newly developed acreage

Agriculture Deputy Secretary Kathleen Merrigan announced on April 27, 2010, that soil erosion on cropland declined by more than 40 percent during the past 25 years, while more than one-third of all development of U.S. land occurred during the same period. The information was contained in the latest National Resource Inventory (NRI) for Non-Federal Lands, which was released at an event marking the 75th Anniversary of USDA's Natural Resources Conservation Service (NRCS), the agency charged with ensuring private lands are conserved, restored, and more resilient to environmental challenges.

"The NRI results are significant because they provide a scientifically-based snapshot of the nation's natural resources and the ability to track trends in natural resource use and condition," Merrigan said. "The NRI provides a wealth of information that can be

used by agricultural and environmental policymakers to make informed decisions about the nation's natural resources."

Key findings from the 2007 NRI include:

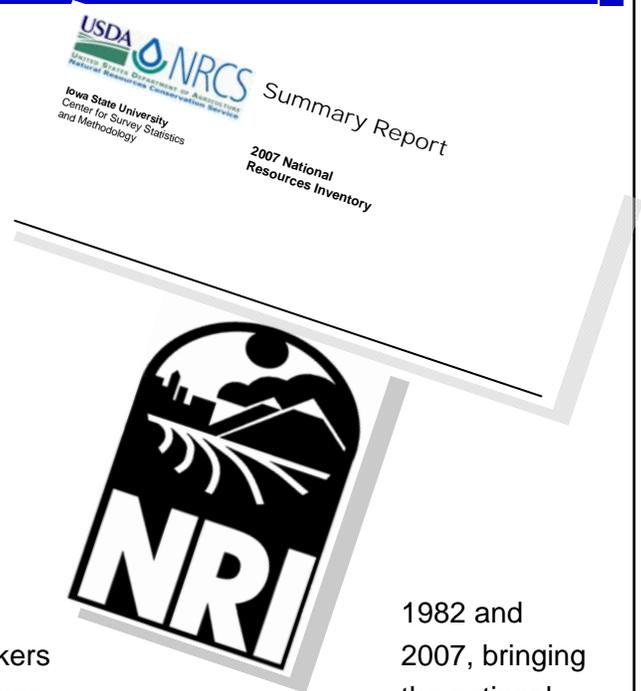
- Total cropland erosion (sheet, rill and wind) declined by about 43 percent, from more than 3.06 billion tons per year in 1982 to about 1.72 billion tons per year in 2007. The reduction reflects NRCS's emphasis on working with producers and landowners to reduce erosion. Most of the soil erosion reductions occurred between 1987 and 1997.
- Cropland acreage declined from 420 million acres in 1982 to 357 million acres in 2007, a 15 percent decrease. About half of this reduction is reflected in enrollments of environmental sensitive cropland in USDA's Conservation Reserve Program. About 40 million acres of land were newly developed between

1982 and 2007, bringing the national

total to about 111 million acres. More development occurred in the Southeast than in any other region. For the NRI, developed land includes rural transportation corridors such as roads and railroads as well as urban and built-up areas which include residential, industrial, commercial and other land uses. The findings on development are important because development isolates tracts of former farmland, which degrades wildlife habitat and makes agricultural production inefficient.

- There were 325 million acres of prime farmland in 2007, compared to 339 million acres in 1982. The acreage of prime farmland converted to other uses such as development during the 25-year period is greater than the combined area of Vermont and

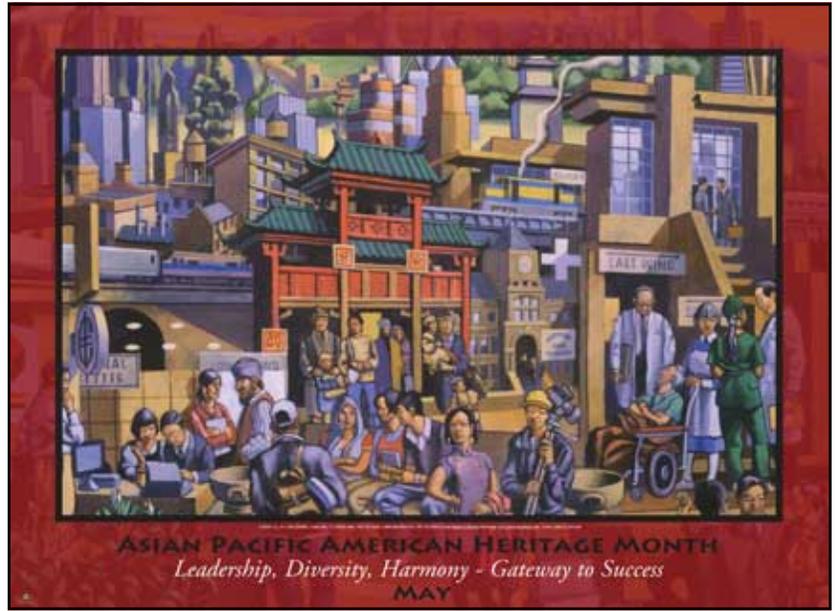
**(See NRI on page 9)**



**NRCS New Mexico Civil Rights  
Asian American/ Pacific  
Islander Heritage Month**

Come join the fun, food and friendship as the Asian American Association of New Mexico presents, **“Annual Festival of Asian Cultures,” on Sunday, May 16** at the Harry E Kinney Civic Plaza in Albuquerque.

The event is free to the public and is scheduled from 10:30 a.m. to 4:00 p.m. The Kinney Civic Plaza is located at Third Street and Marquette N.W.



Performances include 12 ethnic Asian groups (with a group of Maori performers from New Zealand), as well as hands-on arts and crafts. Vendors will be

selling ethnic food and wares. For information call Maida at 505-903-0202.

**NRI ... (Continued from 8)**

New Hampshire and almost as large as West Virginia.

- The total area of developed land in all states, except Alaska and Hawaii, is approximately equal to the combined surface area of Illinois, Iowa and Michigan.

- Land that was newly developed between 1982 and 2007 covered an area slightly larger than Iowa. The largest increase in development was 10.7 million acres between 1992 and 1997.

NRI provides scientifically-based, statistically accurate estimates of natural resource status, conditions and trends on non-federal U.S. land-private,

tribal and trust lands as well as land controlled by state and local governments. The data are suitable for national, regional and statewide analyses and are comparable across the time period 1982 - 2007.



NRCS conducts the inventory in cooperation



with Iowa State University's Center for Survey Statistics and Methodology, a

respected scientific partner.

The NRI will assist USDA in its efforts to complete its Soil and Water Resources Conservation Act (RCA) appraisal.

RCA guides future USDA soil, water and related resource conservation activities on non-federal lands, while considering both the long and short-term needs of the nation.

USDA is scheduled to complete the RCA appraisal by January 2011.

For additional information about NRI, please visit [www.nrcs.usda.gov/technical/nri](http://www.nrcs.usda.gov/technical/nri).

## News Briefs



### Union County N.E. S&WCD teaches kids on tree planting

The Northeastern Soil and Water Conservation District in Union County offers a yearly tree planting presentation to the Alvis Elementary Kindergarten class.

Each year they donate a one gallon Austrian Pine to every Kinder-

gartener in Union County and a five gallon evergreen tree which is planted on the school grounds for the demonstration.

Each year NRCS invites their Earth Team volunteers and partnering Forest Service employees to participate. The event was set for April 26.

## Personnel

### Addition to the family

Congratulations to Resource Conservationist Seth Fiedler and his wife, Marcelle, on the birth of their daughter, Mikaela (Mikki) Fiedler. Mikki was born on Jan. 29, 2010, and weighed 7 pounds, four ounces. The Fiedlers have another daughter, Ria. Seth is assigned to the NRCS NM State Office. (Courtesy photo by Seth Fiedler)



### NRCS Welcomes Two New Team members!

**Kerri Mich**, formerly with the U.S. Forest Service (USFS) Region 3 office, was selected for a GIS Specialist in the Albuquerque State Office.

**Rey Adame**, former Public Affairs Officer for the USFS Albuquerque Service Center's Budget & Finance, is now the NRCS New Mexico Public Affairs Officer.

Both Kerri and Rey began working with us on April 11, 2010. WELCOME!!