

# Cache Conservation News



Every Day is Earth Day for Ranchers and Farmers

**Spring 2011**

## Don't Treat Your Soil Like Dirt

*By Pamela Hole, Director,  
Utah State University Analytical Labs*

Fertility testing of soil on a regular basis is a cost effective way to help maintain good yields while minimizing potential nutrient losses.

Taking a sample that is representative of the area being tested is essential. Start your collection process by first identifying any major differences, such as color or texture, soil type or usage boundaries. Areas that will be fertilized or treated differently should be sampled separately.

A soil sample sent to a laboratory is considered a composite sample and is a physical average of the whole. Select an area of land to be sampled. Then, depending on the size of the area, collect 10-20 subsamples (using a clean bucket and tools). Be sure that each sample contains the same amount of soil and is taken at a consistent depth from randomly distributed spots within the designated area. Clean your equipment between each subsample. Remove any debris from the sample, and mix it as best as you can.

Once the soil in the bucket is mixed, collect the required amount of soil to send to the testing laboratory. Check with the lab for amount needed and to see if there are any other preparations to be made. Many labs have mailing containers available at no additional cost, which will help you determine the proper amount of soil to include for most testing. Be sure to fill the container completely.

*continued on pg. 5*

## LOCALLY LED

*By Paul Leishman,  
NACD Executive Board Member*

In the past, the term locally led has been used to describe a way of addressing natural resources needs – one that begins, is carried out, and ends at the local level. Over the years, the term has been frequently used, perhaps overused at times, but its core concept remains the same and very relevant in the world of natural resource conservation.

The natural resource needs of the local community whether a town, county, watershed or multi-county region are at the core of the locally led process which involves the community in the assessment of those needs, as well as the solutions and priorities. The approach emphasizes voluntary, non-regulatory, incentive-based approaches before use of regulatory measures. It is not driven by any single piece of legislation or any individual program; it is an ongoing, timeless approach that is not tied to any particular year. As such, it is able to be evaluated regularly to ensure it is effectively meeting the long-term needs of the local community.

Locally led is not a program but rather a way of doing business, a way to effectively meet communities' needs and get the right kind of conservation on the ground where it is most needed.

*continued on pg. 4*

*Bare-root Tree & Shrub Sale:  
Saturday, April 23, 8-11 a.m.  
See page 7 for details.*

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## EXTENSION CORNER

### Plant Tags

As customers flock to garden centers, employees do their best to help them all. This can be difficult with the influx of so many people. To make it easier for customers, information tags with descriptions and growing requirements hang from most plants. However, it is still sometimes difficult to determine what all the information means. Below are answers to common questions about plant tags.



*Plant tags do not generally account for local growing conditions. Trust a qualified nursery employee over the tag.*

**What is the USDA cold hardiness zone?**  
The USDA developed a widely accepted system to determine average minimum temperatures in a particular area. Zone 1 is the coldest, with an average minimum temperature of minus 50 degrees, while zone 11 is warmest, with an average minimum above 40 degrees. Cache Valley is within zones 4 and 5, depending on the specific area. The average minimum in zone 5 varies from 10 to 20 degrees below zero, and zone 4 varies from 20 to 30 degrees below zero. The Wasatch Front falls primarily in zones 5 through 7. This system has flaws where uncommon temperature extremes, late or early frosts, soil type and humidity are not accounted for.

**Why is the Latin or scientific name of the plant listed on the tag?**  
The Latin name is absolute, while many plants have more than one common name. To make matters more confusing, two unrelated plants may share the same common name. A locally common groundcover with the Latin name of *Vinca major* is one example. I've heard it commonly called vinca, periwinkle and myrtle. Myrtle is also a common name of

several other unrelated species. If the customer knows the Latin name of a desired plant, it eliminates many potential errors.

**Is the plant description absolute?**  
The Intermountain West has a unique climate while plant tags are usually printed for a national audience. In Utah, our alkaline soil and aridity make growing many nationally "easy to grow" plants, such as dogwood trees and rhododendrons, extremely difficult. Trust a qualified nursery employee over the tag.

**Is the eventual size of the plant listed on the tag absolute?**  
No, it is not. Plant tags do not generally account for local growing conditions. Trees and shrubs often grow at a slower pace here than in more favorable climates. Additionally, when a tree or shrub is planted, soil type, fertilizer, pruning and irrigation methods greatly impact growth rate and eventual size. Always research how big a plant may become, and locate it in a space with enough room for growth.

**What information not listed on the tag do I still need to know?**  
Basic research before purchasing is advisable. Know your needs, what plants you may potentially use, eventual sizes and where particular plants are adapted to grow. USU Extension offers many resources. Tree Browser is an interactive program where desired tree characteristics can be entered, and a list with pictures and descriptions is generated for the user. Access it at [treebrowser.org](http://treebrowser.org). Another is a comprehensive list of shrubs with descriptions at [tiny.cc/mvk08](http://tiny.cc/mvk08).

*Taun Beddes,  
Cache County Extension Agent*

	<b>Blacksmith Fork Conservation District</b> <b>Board of Supervisors</b> Jon White, Chairman Tom Bailey Jay Tuddenham Paul Leishman Richard Nielsen <b>Associate Members:</b> Clark Israelsen  <i>Editor: Cherie Quincieu Printed on Recycled Paper</i>	<b>North Cache Conservation District</b> <b>Board of Supervisors</b> S. Bruce Karren, Chairman Shane Munk Joseph G. Larsen Jason Godfery D Wesley Roundy <b>Associate Members:</b> Clark Israelsen Ken Cardon Steve Chambers
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## PROGRAM NOTES

### Management Intensive Grazing

*By Travis Mote,  
Rangeland Specialist, NRCS*

As the days start getting longer and the grass is greening up, many people are beginning to think about turning livestock out on pastures. At the Natural Resources Conservation Service (NRCS) we frequently receive questions concerning small pasture management. The system we usually suggest is Management Intensive Grazing (MIG). MIG has proven to be an excellent method of maintaining pasture health. The basic concept behind MIG is that grazing one horse for thirty days affects a pasture differently than does grazing thirty horses for one day. Grazing high densities of livestock for short periods of time achieves three objectives: 1) it reduces the number of times an individual plant is grazed, 2) it decreases livestock selectively grazing preferred species, and 3) it allows increased rest of pastures. This increased level of management has shown greater forage production, reduced weeds, and improved pasture appearance. MIG systems use livestock control to manage for the three ingredients of plant production: water, nutrients, and sunlight. This will give desirable plant species the best chance to produce at their potential.

Implementing a MIG system is a lesson in adaptive management. A pasture is typically broken into paddocks that will provide 1-5 days forage. There must be a sufficient number of paddocks to provide 21-30 days of rest between grazing events. Irrigation timing, watering locations, and forage will dictate the size and configuration of paddocks. Paddocks should be arranged in a manner that irrigation can follow the grazing which will improve pasture recovery and avoid soil compaction caused by grazing wet fields. Stock water must be accessible from each paddock. This can be achieved with portable troughs or by building a water lane into the paddock design. Carrying capacity can be estimated by historic use. If the pasture is in good condition the number of animals is likely correct.

Paddocks are rarely designed perfectly the first time. Most people experienced in MIG grazing choose electric fencing to sub-divide the pasture. This creates an inexpensive, flexible system that can be refined as you monitor the livestock use of the pasture.

Operation of the MIG system is fairly simple. Animals are turned in when grass is 6 - 8 inches and pulled out when grass is 3 - 4 inches. Early in the year, during rapid plant growth, animals may need to be moved more frequently to prevent plants from moving to the reproductive stage. Haying or mowing operations will also help maintain plants in the mid-vegetative stage. After animals are moved out of a pasture, weed management and mowing wolf plants that avoided grazing should be preformed. Animals are moved through the grazing circuit ensuring leaf height is never below three inches and each paddock receives at least twenty-one days rest. This may require corralling animals for a few days during the rotation. As experience is gained, paddock size and placement should be adjusted to level livestock utilization across each paddock.

Converting a pasture to a MIG system takes increased time and management. Rather than just turning the horses out the back gate you are directing when and where they graze. Increasing your time investment will pay dividends. Forage production is better utilized. Plants are given the opportunity to remain in a vegetative rapid growth phase for a longer portion of the year, which increases production. This can have significant financial benefits to livestock growers. Forage managed in a mid-vegetative phase will maintain a higher balance of energy, protein, and availability benefiting animal health and weight gain. When pasture health is maintained, undesirable plant species are reduced, improving the quality and aesthetics of a pasture. MIG systems work well for small and big pastures alike. MIG takes more work but in most cases it pays. For more information drop by your local NRCS office at 1860 N. 100 E. North Logan.

*The basic concept behind MIG is that grazing one horse for thirty days affects a pasture differently than grazing thirty horses for one day.*

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## Logan Northern Canal Update: Preferred NRCS EIS Alternative

By Bob Fotheringham,  
Cache County Water Manager

The NRCS met on March 29, 2011 with the combined councils of Cache County, Logan City, North Logan, Hyde Park and Smithfield to discuss the draft EIS for the Logan Northern Canal Reconstruction Project. The alternatives include purchasing properties along canyon road on a willing seller basis in the zone of probable landslides near the disaster area.

The preferred alternative selected by the NRCS is the purple alternative. It would deliver water through the Logan Hyde Park Smithfield Canal, which diverts from the Logan River below Second Dam in Logan Canyon, carry water in a 6 x 6 box culvert to the Logan Golf & Country Club then transition and flow northward in a 12 x 5 box culvert to 1500 N., then run west in a pipeline to the Logan & Northern Canal and discharge into the canal. A portion of the water would remain under pressure in a pipeline south to the temple ditch to supply water to users south of 1500 North. The water users along Canyon Road would be serviced by a small pressurized line from the current point of diversion to the landslide area. NRCS studies show the purple alternative to have the lowest cost, estimated at \$20.4 - \$22.4 million.

The Canyon Road Corridor, blue alternative, costs were estimated at \$24.1 to \$26.5 million but may be even higher depending on the required in-depth Geotechnical study. The orange alternative, 3100 North, was very expensive at an estimated cost of \$39.5 to \$43.4 million.

The EIS demonstrates that there are no significant impacts to the environment from any of the alternatives studied. The project will 1) re-establish water to shareholders, 2) reduce risks from future landslides by purchasing residential structures, 3) conserve an estimated 7,500 acre feet of water, 4) provide long term community benefits from major water infrastructure improvements, and 5) facilitate multiple use of the water resources in Cache Valley.

A public meeting was held March 31, 2011 to inform the public of the Draft EIS and solicit comments. Comments are due by May 2, 2011. To make a comment send email to LNC-EIS@hdrinc.com.

## Medusahead WPA

The South Cache Medusahead Weed Prevention Area (WPA) is looking forward to another successful year. The original project acres have been completely treated and are on the way to recovery. With the success of those acres, the project is now open to new acres for treatment on a first-come, first-served basis. Landowners selected for treatment will be given chemical to spray for medusahead rye. As part of the project we would like to map all acres sprayed and keep records of how the plot was treated. Landowners will be given different treatment options to determine which best fits their operation. Medusahead is a very aggressive weed that has taken over many sites in Cache and Box Elder counties; we need the help of all the landowners to stop the expansion of this weed. For more information about medusahead treatment please feel free to call Colby at (435) 753-5616 x115 or send email to colby.mower@ut.nacdn.net.

*cont. from pg. 1 "Locally Led"*

Districts need to take the lead to ensure the process stays at the local level. They can do so by helping each community identify its needs and serving as a gateway between the community and outside technical, funding and educational resources, using a mix of federal, state, local and private sector programs as tools to solve local concerns. Districts then need to carry out all conservation programs at the local level.

With the leadership, hard work and ingenuity they are known for, conservation districts have the ability to step forward and ensure the process begins, is carried out and ends at the local level, ultimately ensuring all the natural resource needs of their communities are met.

cont. from pg. 1 "Don't Treat Your Soil Like Dirt"

Determining what to test the soil for is also important. You should know ahead of time what crops you intend to plant, as they have different soil requirements and tolerances. Keep in mind what information each of the individual tests will tell you. Below are some of the most common tests:

**Salinity**– this measures the soil's salt content. Some crops are more sensitive to higher salinity than others. Highly saline soils affect how much of the water in the soil is available for uptake by the roots of plants.

**Soil pH**– tests indicate whether a soil is acidic (pH is 0-7), alkaline (pH is 7-14), or neutral (pH = 7). Typical soils in the Western US range in pH from 6.5 to 8.0. Many mineral elements have more than one chemical state, and may be more or less available to plant roots at different pH levels. Iron has two inorganic states: an oxidized state and a reduced state. The oxidized state, (e.g., rust) is not available to plants, and is the most prevalent form of iron in alkaline soils.

**Soil texture**– this test can help determine how well your soil will drain excess moisture, as well as its water/nutrient holding-capacity. Soil texture generally does not change much from year to year, and therefore does not need to be determined annually.

**Soil nutrient analysis**– the major nutrients needed by plants, Nitrogen (N), Phosphorus (as P<sub>2</sub>O<sub>5</sub>), and Potassium (as K<sub>2</sub>O). Whether you need to analyze for all three nutrients depends on what crop(s) you are growing, recent fertility treatments, organic matter levels, and previous legume growth in your soil. There are also tests for organic matter (OM), which can improve both water retention and nutrient availability in soils with high sand content.

Most county extension agents are well able to assist you in selecting the soil analyses you need. They can also help you determine what steps to take to correct soil problems indicated by the analyses. You can locate your local agent at [www.extension.usu.edu](http://www.extension.usu.edu).

## 2011 Legislative Review

By Gordon Younker, UACD

Here are some bills passing the Utah Legislature that should be of interest to Utah conservation districts.

**S.B.32 S02 – Ag Act Amendment**, sponsored by Senator Okerlund: Amends the function of the Department of Agriculture and Food to include promotion and support of multiple use of public lands, expands the duties of the state conservation commission for environmental compliance of farms and ranches, including certification of environmental stewardship, expands the use of ARDL loan funds for projects on private, state, and federal land, allows UDAF to administer EPA and Utah Division of Water Quality water and waste related programs by assignment of the governor.

**S.B.132 – Water Quality Amendments**, sponsored by Representative Wright: Requires the Board of Water Quality to cooperate with the Utah Conservation Commission in making rules related to agriculture and authorizes the Board to make rules relating to agriculture water that are more stringent than federal regulations only if the Commission approves.

Other bills passing:

- H.B.57 – Joint Professional School of Veterinary Medicine
- H.B.495 S1 – Animal Control Modifications
- S.C.R.15 – Resolution to Delist Wolves
- H.C.R.4 – Concurrent Resolution on Wild Horses and Burros

Not passing this session:

- H.B.88 – Agriculture Sustainability Taskforce
- H.B.348 – Water Quality Board Amendments
- S.B.82 – Urban Farming Assessment Act

For complete copies of these and other bills of interest please go to <http://le.utah.gov>.



*County extension agents can assist you in selecting the soil analyses you need.*

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 **GLEANINGS****COMING EVENTS**

- April 23, 8-11 a.m. Bare-root Tree & Shrub Sale, Cache County Fairgrounds
- April 29 & 30, Utah Envirothon, USU Campus in Brigham City and Bear River Migratory Bird Refuge
- April 30, Selman's Sharp-tailed Grouse Birdie Day, meet at 5:45 a.m., breakfast at 8:00 a.m.
- May 17-21, Richmond Black and White Days
- June 1, Sign-up deadlines for ACRE & DCP
- June 30, deadline for acreage reports
- June 4, 10 a.m.- 2 p.m., Bear River Celebration and Free Fishing Day
- June 29, Twenty-seventh Annual Conservation Field Days, Filmore
- North Cache Conservation District board meetings: third Wednesday of each month, 8 p.m., USDA Service Center, 1860 N. 100 E., North Logan
- Blacksmith Fork Conservation District board meetings: fourth Thursday of each month, 1 p.m., USDA Service Center, 1860 N. 100 E., North Logan

**BOARD ACTIONS****Joint Actions**

- Elected Bruce Karren as zone commissioner
- Sponsored the Northern Utah Mini-Water Conference.

**Blacksmith Fork**

- Approved fifteen conservation plans;
- Approved one ARDL request;
- Approved two 319 plans.

**North Cache**

- Approved seventeen conservation plans;
- Approved three ARDL requests;
- Approved one CRP contract;
- Sponsored four Utah Envirothon teams.

Go to [www.uacd.org](http://www.uacd.org) for a link to videos of the 2011 Northern Utah Mini-Water Conference, Cache County Crop School and AFO/CAFO workshop.

- The North Cache Conservation District sponsored recordings of the 2011 Northern Utah Mini-Water Conference, Cache County Crop School, and AFO/CAFO workshop. Go to [www.uacd.org](http://www.uacd.org) for a link to watch the videos online or call the UACD office, 753-6029 x114, to request a copy.
- On April 3, 2011 Tony Grove Lake's snowpack measured 133 inches deep with a Snow Water Equivalent (SWE) of 55.6 inches, 17.6 inches above the average SWE. On the same date, the SWE for the entire Bear River Basin measured 142% of average and 232% when compared to the 2010 basin-wide snowpack.
- National Agriculture Day took place on March 15, 2011. Here are some quick facts about agriculture in Utah:
  - There are 16,600 farms and ranches in Utah.
  - The average farm size is 669 acres and that size has been shrinking for many years. *The average-sized farm in the U.S. is 418 acres.*
  - Just 3% of the farms in Utah generate 75% of all the raw products from the farm.
  - The raising of cattle and calves generates \$245 million in farm income in Utah.
  - Dairy production generates \$215 million in Utah.
  - The value of alfalfa hay sold in Utah is \$182 million.
  - Cache County is the #5 agriculture producing county in Utah.

Go online to see Utah farmers answer consumers' questions about food and agriculture at [www.ag.utah.gov/news/AgDay2011.html](http://www.ag.utah.gov/news/AgDay2011.html)

- Mark your calendars for the opening day of the Cache Valley Gardeners' Market. The market always opens the Saturday before Mother's Day. This year, that is May 7th. Go to the Cache Valley Gardeners' Market facebook page for the most up-to-date information as well as notifications about gardening classes and workshops.

For more on the work of Utah's conservation districts, go online: [www.uacd.org](http://www.uacd.org)

## 2011 Bare-root Tree and Shrub Sale

Tree and shrub orders will be ready for pick-up on April 23 from 8-11 a.m. at the Cache County Fairgrounds. Additional shrubs and plants will also be available for purchase the day of the sale.

Varieties include swamp white oak, green ash ponderosa pine, blue spruce, buffaloberry, flame willow, snowberry and more. To see all available

varieties and prices, go to [uacd.org](http://uacd.org) and click the Blacksmith Fork Tree Sale link. Arrive on time as remaining stock sells quickly.

Note: American linden and red-leaf barberry are sold-out and will not be available for purchase the day of the sale.




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## CONSERVATION CLASSROOM

### Growing With Kids

By *Lyndi Larson Perry*,  
*AITC Outreach Coordinator*

Planning a youth or community garden this spring? Check out the Utah School & Youth Garden Network! Whether you are planning your first garden or just need of educational activities for kids, the Garden Network website, [www.utahgardennetwork.org](http://www.utahgardennetwork.org), can help.

This one-stop shop for all things garden is packed with useful information for beginners, including:

- Tips for getting started, both indoors and outdoors and for all budgets
- Lists of annual and perennial plants that make gardening easy
- Outlines and resources for different gardening techniques (e.g., square foot gardening, row gardening, etc.)

- Professional advice for maintaining your garden throughout the season
- Troubleshooting websites for solving any problems with your plants

The site provides other useful tools for all gardening skill levels:

- Garden Talk– a fun resource center with regular updates to keep you informed of the latest in gardening curriculum, educational resources, and news
- A compilation of our favorite providers for equipment and supplies like Jiffy pots, red wriggler worms, grow lights, and more!
- Great resources for learning– free lesson plans, highlighted curriculum packages, and book recommendations

#### Grants and Funding:

One thing every garden could use to get green, is green! The Garden Network website maintains a regularly updated list of funding and grant opportunities, so check in often to see what is available for your garden projects. Some of the many opportunities highlighted include the *Muhammad Ali Center*

*Peace Garden Grant*, the *Yes to Carrots Garden Challenge*, and *America the Beautiful Fund* (supplies free seeds to nearly all who request them). Never written a grant before? Now is a great time to get started– many funding sources provide supplies to several organizations and fund multiple projects every year, so no need to be shy. Get what you need to get growing!



### Important phone numbers

Conservation districts	753-6029
USDA-NRCS	753-5616
Cache County Extension	752-6263
USDA-FSA	753-5480