



Mountain Living High and Dry

It's a New Year

"As long as earth endures, seedtime and harvest, cold and heat, summer and winter, day and night will never cease." Genesis 8:22, the Bible

The quote above personally brings me comfort. While we all don't share the same world view, I think we would all agree that we live in a world that is changing and does not always feel secure.

Our world and our lives are made up of somewhat repeating cycles and seasons and new beginnings. A new day begins most often for me as I watch the sun come up over the Sneffles Range while I drink my coffee in the quiet and set my goals for the day. A New Year begins each January 1 (for many, but not all, of us). We often make New Year's Resolutions that we might or might not keep but the real gift is that we have the opportunity to re-evaluate and for a new beginning!

January 17, 2013 I will begin my 8th year as Director of CSU Extension in San Miguel and West Montrose Counties. I am thankful for the gift to do what I love and to grow in it. We are here to serve the needs of each very important person, family and organization in our area that comes to us for help with their endeavors, be it 4H, raising food or managing land and resources effectively!

In the past 7 years, we have thoughtfully planned what we would focus on in our office. We have done surveys, formed committees and asked for constructive feedback. We have tried to provide the most reliable information to those who come to us for help. We have had some terrific successes and some disappointing (seemingly) failures. But overall, we have helped people! We are excited about beginning a new year!

Of course we don't know all that this new year will hold. Will we get good enough snow-pack for our spring and summer needs or will we possibly have our worst drought on record? Will the economy improve or decline? Will we and our land be in good health or poor health? We never know for sure what any year or even any day will hold but we can always get the education and make the effort to manage all of our precious resources more wisely. And while we are doing our best, we can enjoy each and every breath, relationship, sight, smell and taste that each and every new day holds.

In 2013, may you be prosperous, healthy and aware that you are blessed!

Drought Updates www.ext.colostate.edu/sanmiguel/

The beginning is the most important part of the work.- Plato

- January 7 SMBE Staff Meeting
- January 13 4H Council Meeting, 2 pm, Glockson Building, Norwood
- January 14 SMB Fairboard Meeting, 6:30, Glockson Building, Norwood

January 28-31 County and Area Director Annual Meeting, Breckenridge

February 4-8 Cally in Fort Collins at New Staff Orientation

Colorado Master Gardener Reinstatement forms are due!



SAN MIGUEL BASIN 4-H NEWS



GPS Activity-Fall EAD

What is 4-H STEM?

In response to concerns raised by a study conducted by the National Academy of Science Committee on Science, Engineering and Public Policy, *Rising Above the Gathering Storm*, 4-H chose to make STEM an organizational priority, focusing the power of research-based knowledge and positive youth development philosophy on increasing the number of youth exploring careers in math and science, taking higher level math and science classes in high school, and choosing STEM majors in college and pursuing STEM careers. The goal of the 4-H effort, "One Million New Scientists, One Million New Ideas," is to provide opportunities for one million new youth to engage in and explore STEM through 4-H programs.

4-H STEM is a unique blend of:

- Standards-based science and math content
- Application of science, engineering and technology process skills
- Learning through hands-on, inquiry-based experiences connected to real life interests & issues
- Support from adults acting as guides, facilitators and mentors
- An intentional infusion of life skills
- A chance to give back to the community

STEM Activity

Age Appropriate: 4th—HS grades Time Required: 120 minutes Materials: HEAL (Home Energy Audit Loan) kit (your local extension office has a free loan) <http://www.ext.colostate.edu/cedirectory/countylist.cfm>

What you need: Computer, Printer, Pencil or pen

Be sure to call the extension office to reserve the HEAL kit before you go to get it. Be sure to return it on or before its due date. The HEAL Kit is optional to conduct your audit, but will help you get accurate results and anyway is just fun to use!

Go online to the CSU Extension website <http://www.ext.colostate.edu/energy/heal/> and watch the video to see how to work the instruments.

Click on "DIY Home Energy Audit" (or go to <http://diyenergy.colostate.edu>) and follow the instructions to conduct the audit. If you have a smart phone, you can use that to conduct the audit. Just carry the phone around with you and enter your data on it. When you are done, email the audit report to yourself.

As you collect the data, you may have some questions. Click on the green exclamation points you'll see on the website to get additional information to help you through your audit.

With the hard copy (or smart phone) collect your data with the thermal leak detector and kill-a-watt meter. You can check florescent tubes with the flicker checker. While you are working, there is a column for you to make notes as well as a place to record your numbers.

If you collected your data on a paper copy instead of a smart phone, enter those data on the website when you're done. It automatically calculates the results for you.

Print the completed energy audit and evaluate the different steps that you can take to start the savings.

Windows and doors are common places in a home that will lose a lot of heat in the winter or cool in the summer. Buying and caulking cracks around windows, covering the windows with insulate plastic, and adding weather stripping around the door can mean tremendous savings in the monthly energy bill throughout this cold winter.

THE 4-H YOUTH DEVELOPMENT PROGRAM IS A GROWING, CHANGING AND EVOLVING ORGANIZATION OF YOUTH, VOLUNTEERS AND SALARIED STAFF WHO WORK TOGETHER TO PROVIDE A SAFE ENVIRONMENT WHERE COLORADO 4-H YOUTH DEVELOP LIFE SKILLS. THE 4-H YOUTH DEVELOPMENT PROGRAM IS UNIQUE FROM OTHER YOUTH ORGANIZATIONS THROUGH ITS RELATIONSHIP WITH THE UNITED STATES DEPARTMENT OF AGRICULTURE (USDA); COLORADO STATE UNIVERSITY (CSU), THE STATE'S LAND-GRAND UNIVERSITY; EXTENSION (CE); AND SAN MIGUEL COUNTY. WITH PUBLIC, CORPORATE AND PRIVATE-SECTOR FUNDING, THE PROGRAMS ARE RESEARCH-BASED, AGE-APPROPRIATE, AND DESIGNED FOR EXPERIENTIAL LEARNING. 4-H YOUTH DEVELOPMENT PROGRAMS ARE OPEN TO ALL ECONOMIC, SOCIAL & CULTURAL GROUPS, FOR YOUTH AGES 5-18 (AS OF JANUARY 1, 2013).

4-H IS A COMMUNITY OF YOUNG PEOPLE ACROSS AMERICA WHO ARE LEARNING LEADERSHIP, CITIZENSHIP AND LIFE SKILLS.

Gardening in the Winter?

At times, when our super hero volunteers and myself (I get paid for this so I don't get super hero status!) have waded through knee high snow to get to our beds, removed snow from the covers, been locked out and therefore trapped in the yard with the beds, hauled buckets and buckets of water by hand, I've wondered 'why are we trying to grow food in the winter'? What are we trying to prove? Why not just go with the status quo and get some rest?! Then I remind myself that this is useful for those of us who really want or need to grow food during the winter! Or for those who want to prove, for whatever reason, that they can!

We are pushing our limits, learning new things and confirming already discovered things about growing food in our challenging climate and currently we are focusing on growing without supplemental heating and/or lighting in the winter.

We grow in raised beds in Telluride to demonstrate how home gardeners and small scale farmers can best extend our short season: what plants and varieties grow best under which covers. This is our second winter season where we have grown spinach, kale and mache (corn salad) through the winter! Two other Extension Offices in Colorado are doing the same thing. (It's so good to know we are not the only crazy people out there!)

We have a small scale production high tunnel greenhouse in Norwood at the Norwood Community Garden. This is our first winter to grow inside it. We are growing different varieties of spinach, mache, arugula and kale.

From both locations we seeded in September and harvested greens up until Thanksgiving and again from the High Tunnel greenhouse right before Christmas! Right now the plants are in a sort of dormancy, brought on by the long nights of winter and the cold temperatures— whew! (There is some relief for us and the plants!) In late February the plants should begin to grow more actively again. During our coldest snaps when it was in the negative digits outside, it only dipped to 11 degrees inside the tunnel under the row covers. We haven't uploaded the data from the data loggers in Telluride yet to know how cold it has been under cover but do have plants exposed to all the elements that are smaller but alive!

What have we learned, so far, that we can pass along to you?

Kale is supposed to be one of the hardiest greens to over-winter but for the second year in a row, across all locations, the kale is struggling to grow. It has exhibited the most desiccation and more plants have died. We will try planting earlier next year to get better root growth before it gets cold.

This year in Telluride, we moved our seeding dates up to the first week in September (a week or 10 days earlier than last year) in order to get enough rooting and growth for a late fall/ early winter harvest in addition to a late winter/ early spring harvest. It worked!

In the High Tunnel in Norwood next year, we will plant some varieties, like arugula and corn salad, later in September, instead of mid September but most importantly, we will plant a succession of times instead of all at once.

Harvesting only 1/4 to 1/3 of older leaves rather than cutting the entire plant will allow the plants more reserves to survive. This type of harvesting requires wider spacing.

If you don't harvest enough outer leaves early on, the arugula may bolt (send up flower stalks). These need to be removed but can be eaten.

In order for a plants cells to produce 'antifreeze' to survive extremely cold temperatures and recover from freezing solid, they need to be properly hydrated. We over-watered last year in the beds in Telluride, causing the plants to suffer nutrient deficiency and reduced growth. But we under-watered this year in the high tunnel. (You can only haul so much water by hand!)

If you want a more reliable, continuous harvest through the darkest days of winter, then foremost, you will need to provide supplemental lighting. This is important for plants that grow in response to day length. Or try varieties that aren't responsive to day length and plant in time to get good root growth before it gets really cold. During warm spurts the stored energy and food in the roots will cause some new growth in the leaves. Additional heat will encourage growth in plants that aren't day length responsive.

Just because its freezing outside doesn't mean you won't get insect pests. We've had army cutworms and aphids.

For more details or questions contact me (Yvette) at 327-4393 or Yvette.Henson@colostate.edu.





**SAN MIGUEL BASIN
COLORADO STATE UNIVERSITY
EXTENSION**

PO Box 130
1120 Summit Street
Norwood, Colorado 81423

Phone: 970-327-4393
Fax: 970-327-4090
E-mail: maryw@sanmiguelcounty.org
Yvette.Henson@colostate.edu
Cally.Anderson@colostate.edu

**Serving San Miguel and West
Montrose Counties since 1921**

Visit us on the web!
www.extension.colostate.edu/sanmiguel/

The Mission of Colorado State University Extension is "to provide information and education, and encourage the application of research-based knowledge in response to local, state, and national issues affecting individuals, youth, families, agricultural enterprises, and communities of Colorado."

The Extension Office in Norwood serves all of San Miguel County and West Montrose County. We have been actively working on a grassroots level to help the people in our communities to live more self-sufficient and prosperous lives since 1921. Some of the educational programs and areas we excel at are Local Food Production and Marketing, Food Safety and Preservation, Colorado Master Gardener Program for Mountain Communities, 4-H and Youth Development and after school programming, Native Plant Master, Small Acreage and Agriculture Enterprises.

Our environment, the San Miguel River Watershed is beautiful and diverse. Our elevation and life zones range from high desert shrub lands around Paradox and Dry Creek Basin at 5,000' climbing to montane and alpine around Telluride at 14,000'. We have wide open, sunny pastures of hay, horses, cattle and sheep on Wrights Mesa at 7,000' where the Extension Office is located in Norwood. Our area provides an assortment of recreational activities to a variety of people.



The Importance of Setting Goals

Over the holiday break, I was talking to my daughter Caitlin about her internship in Washington DC. She is working in a public charter high school with the some of the most "at risk" youth in the city. She is trying to help the staff learn and implement restorative justice practices in a system with strict 'one strike you are out' policies.

She was explaining that they have found that the students are limited in the basic life skills and don't know how to set goals and therefore they are limited in their ability to have success in life.

It immediately brought to my mind that the greatest strength of 4H is just that— life skill development. I frequently hear from past 4H members that are now adults that they still actively practice the projects they learned in 4H either as careers or as hobbies but I hear even more often how 4H helped them to be a success in other areas outside of their project experience like setting goals, public speaking, etc. Last month our newsletter had an article on the results of the Tuft Study and the impact of 4H on member's lives and the communities they are a part of.

Following is an excerpt from a Newsletter from the University of California Cooperative Extension. ***Lifeskills, Vol. 2, No. 4. Winter 2001.***

5 Steps to Reach your Goals

- Step One** *Clearly identify your goal. Write it down. Be specific.*
- Step Two** *Weigh the benefits of the end result. How will the end result benefit you? What will you have to give up?*
- Step Three** *Brainstorm different ways to achieve your goal. Determine what resources you'll need.*
- Step Four** *Commit to the goal. Set a realistic target date to achieve your goal. Decide on a plan for accomplishing your goal.*
- Step Five** *Be flexible. Things always don't go as planned. Evaluate if you need to adjust your plan or your goal.*

To read the article in full go to this link <http://www.danrpeoplelinks.ucr.edu/nb3/lib/>