Training Today for Tomorrow



MESSAGE FROM MANAGER ALAN LESLEY

By reading this column, you're helping CECA fulfill the Fifth Cooperative Principle, "Education, Training and Information," one of seven guidelines that govern cooperative operations.

In fact, right now you're reading one of your co-op's primary conduits of education and information, Texas Co-op Power. Through these pages, we communicate directly with you, our consumer-members, on important co-op business such as bylaws changes and director elections. We also share energy conservation tips to save you money and safety information that could save your life.

But we don't stop there. We sponsor programs to educate youth in our service areas.

We also support student education through our scholarship program, and we've been sending outstanding high school students to Washington, D.C., for a week every summer as part of the nationally organized Governmentin-Action Youth Tour. Youth Tour students receive an all-expense-paid trip to the nation's capital to visit historic sites, see important governmental buildings, meet lawmakers and learn how our system of government works.

Our educational efforts extend to our employees as well. We encourage and support them to take courses to improve on-the-job skills through our state organization, Texas Electric Cooperatives, or the National Rural Electric Cooperative Association, the national service organization representing more than 900 consumer-owned, not-forprofit electric cooperatives, public power districts and public utility districts in the United States. We believe well-trained employees are more valuable to the co-op and can provide you, our members, with the high quality of service you've come to expect.

We also sponsor safety seminars for our linemen, field workers and office personnel. This education is vital to keeping our workforce safe and reduces costs involved with losttime accidents.

Keeping you informed—so you can vote for directors, learn to manage your energy use or understand how your co-op employees are working to better serve you—is one of our most important responsibilities. That's the cooperative difference.

COOPERATIVE PRINCIPLE

Education, Training and Information

Cooperatives provide education and training for their members, elected representatives, managers and employees so they can contribute effectively to the development of their cooperatives. They inform the public—particularly young people and opinion leaders—about the nature and benefits of cooperation.

COOPERATIVES—Owned by Our Members, Committed to Our Communities



HEADQUARTERS

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OFFICE HOURS

7:30 a.m. to 4:30 p.m. Monday through Friday Eastland closed from noon to 1:15 p.m. Early closed from 1 to 2 p.m.

FIND US ON THE WEB AT WWW.CECA.COOP.

YOUR "LOCAL PAGES"

This section of Texas Co-op Power is produced by CECA each month to provide you with information about current events, special programs and other activities of the cooperative. If you have any comments or suggestions, please contact Shirley at the Comanche office or at sdukes@ceca.coop.

SCHOLARSHIP FOR EXCELLENCE AWARD RECIPIENTS



Tiffany Louise McCaghren is a 2012 graduate of Cross Plains ISD. She is the daughter of Cindy and Johnny McCaghren. She will be attending Freed-Hardeman University in Henderson, Tennessee, and is seeking a counseling degree.



Emily Murphree is attending Howard Payne University in Brownwood. Her goal is to receive a degree in biology. Emily is the daughter of Ted and Sherri Murphree of Rising Star.



Christine Nicole Salmon is the daughter of Jim and Sandra Salmon of Early. Christine is attending Howard Payne University and pursuing a vocal performance degree.



Riley Scroggins is a student at Abilene Christian University. Riley is the daughter of Kevin and Tammie Scroggins of Cisco. She is majoring in art education.

OPERATION ROUND UP SCHOLARSHIP RECIPIENTS



Maria Delores Garcia is a 2012 graduate of Gorman High School. She is the daughter of Gerardo and Maria D. Garcia. Delores will be attending Tarleton State University.



Rachel Clawson is a student at Texas State University, where she is majoring in biochemistry with a minor in biology, specifically pre-pharmacy. Rachel is the daughter of Jack Guy Clawson of Comanche.

CECA Awards Scholarships

CECA is pleased to announce the winners of six \$1,000 scholarships awarded to area students. Congratulations go to Emily Murphree, Tiffany McCaghren, Riley Scroggins and Christine Salmon for winning CECA's Scholarship for Excellence, and to Delores Garcia and Rachel Clawson for receiving Operation Round Up scholarships. CECA wishes these students the best as they pursue their educational goals.



Conservation MATTERS

THE LATEST NEWS AND INFORMATION ABOUT ENERGY CONSERVATION FROM YOUR ELECTRIC COOPERATIVE

Beat the Heat

Keep your home cool and energy bills lower with savings tips

A cold glass of lemonade. A shade tree near a rushing brook. A paper fan swished back and forth.

The advent of air conditioning replaced these time-tested methods of staying cool. But with quick relief from stifling heat also came higher electric bills. Now, the U.S. Department of Energy estimates that 9 percent of Americans' household energy costs are dedicated to cooling.

But you don't have to sacrifice comfort and convenience to save on your bill. All it takes is smart planning, a little elbow grease and dedication to beating the heat—and high bills.

Air Conditioning Units

Logic would seem to dictate that a larger air conditioning unit would work better. However, a unit that's too large for its space will operate inefficiently and fail to control humidity. Whether you have a window unit or central air, correct sizing is key.

If you're in the market for a new air conditioner, be sure to purchase one with an Energy Star label, which means the product has met specific energy-efficiency standards set by the federal government. Room units are about 10 percent more efficient than their non-Energy Star counterparts, while central units are about 14 percent more efficient.

Once you've determined whether your air conditioner is the correct size or have picked out a new one, adjust the settings to maximize efficiency. Use the "auto" function instead of running the fan all the time. Regular maintenance is a good idea, as is changing the air filter at least monthly.

·· BY MAGEN HOWARD

Also, set your thermostat as high as you can while maintaining your comfort level. The smaller the difference between indoor and outdoor air, the lower your cooling costs will be.

Programmable Thermostats

Speaking of thermostats, a programmable model could help you save big bucks. It can automatically raise the temperature during times of the day you specify. But if you purchase one, it's important to take the next step and program it—a step many people fail to take.

Seal Air Leaks

A home that feels cold and drafty in winter becomes hot and stuffy in summer. Taking time to seal air leaks in your house will offer lower electric bills year-round.

Add caulk and weatherstripping around doors and windows, and check where walls meet ceilings and floors. Pay particular attention to recessed canister lights and electric outlets. Check air barriers that are working in conjunction with your insulation. Sealing the cracks and joists in your attic will help your insulation do its job.

Seal Ductwork

Ductwork could be the most important piece of equipment to seal. If it's exposed, you can do this yourself with a paintbrush and mastic, which you can purchase at any home improvement store. If ductwork is not exposed, hire a professional contractor.

Leaky ductwork will make your air conditioning system work harder than it should, driving up your electric bills and wearing out HVAC equipment.



Regular maintenance for your air conditioner, including checking for a clean filter, will help it run more efficiently.

Landscaping

Planting a tree or climbing vine not only adds a little flavor to your home's landscape, but it also can cool your house when the sun beats down. Trees in the right spot can decrease your home's energy use by up to 25 percent, according to the DOE.

Plant deciduous trees—those that lose their leaves every year—on the south and west sides of your home, and you'll gain shade in the summer and sunshine in the winter.

Magen Howard writes on consumer and cooperative affairs for the National Rural Electric Cooperative Association.



Creath and Laura Switzer left a 'truth window' in the living room of their straw bale house. With the finished floors and the painted stucco walls, one would not know that this house was anything but a conventional home.

Sweat Equity A Energy-Efficie

BY SHIRLEY DUKES

HERE, PIGGY PIGGY!

We have all heard the tale of the three little pigs, how the first one built his house of straw and the big bad wolf blew it down and ate him up. Creath and Laura Switzer heard that story also, but apparently they missed the meaning. "Why?" you may ask. Because they built their house of straw! "Are they insane?" You might want to know. No, they are not.

The idea of a straw house was originally Laura's. She had seen a program on PBS in the early '90s on how to build a straw bale house. Having always been interested in renewable resources, she was intrigued. A few years later, she ran across a book with all kinds of alternative building methods, including houses made of cordwood, cob, bottles, and-you guessed it-straw bales. Some of those ideas seemed a little farfetched, but she was still drawn to the idea of the straw bale house. "It's a green, alternative building method," she says, "and I was just really interested in it. And the more I researched it, the energy savings over the lifetime of the house was what really sold me on it."

Creath was not enthused about the idea at first. It took some smooth talking on Laura's part, as well as a video showing an open flame being applied to both a conventional house and a straw bale house. The conventional house went up in flames; the straw bale house did not. "That was the selling point for me," says Creath. "Even if the wood in the framing caught fire, the straw will not burn because it's packed so tightly that there is no oxygen in it. Plus, it's a

/ields Home of nt Straw Bale

home we could build ourselves and not have to contract everything out."

The foundation, plumbing and framing were contracted out. However, Laura and Creath worked side-by-side with the contractors on these projects. Laura had considered doing the sheetrock herself, but decided that the 9-foot ceilings might be a little too much for her to handle. "Besides," says Laura, "they could come in and knock out in one day what would take a week for me to do."

Laura had worked for a while with a woman who owned and managed a string of rental houses, and had learned to do everything from plumbing to sheetrock. Her knowledge and expertise led Creath to decide that if this was going to happen, she would have to be in charge. "My philosophy in life is, why do today what you can put off 'til tomorrow," said Creath. "She's a go-getter. So I said, 'You're gonna be the one that's in charge. I'll do exactly what you tell me to do, but I don't know how to do nothin'."

Laura drew up the floor plans but knew she needed someone to refine her drawings and get precise measurements. Tommy Clark in Gorman had previously researched straw bale houses for another client and had knowledge of what needed to be done. Laura sought him out and solicited his assistance, and could not be happier with the outcome.

The bales used in a straw bale house cannot be just any old hay bale, or you will definitely have critters in the walls. Straw bales are not a food source for rodents, so they are not drawn to it. Also, it is packed so tightly that they cannot get in even if they wanted to,



FROM TOP: Before setting the bales, Creath and Laura had to lay a moisture barrier of tar paper and a bed of gravel between treated posts. The bales were then snugly positioned between the support beams, much like stacking blocks or Legos.



TOP: Windows and doors are strategically placed to add support to the entire structure. MIDDLE: The bales are so uniformly and tightly bound that a chainsaw or hedge trimmer must be used to cut them to size, or to trim out space for conduit or support beams. Creath says there were times when he had to cut a bale as many as eight times before being content with its fit. BOTTOM: Once the bales were in place, the Switzers installed 2-by-2-inch welded wire on both the interior and exterior sides of the bales. They then used a baling needle and wire to sew the interior and exterior together and keep the wire pulled tight against the bales.

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We were living in a 400-squ and our bills were running \$ Our highest bill since movin

unlike a conventional house where nooks and crannies behind the walls abound. The bales must be packed so tightly that they contain no oxygen. They also have to be as uniform and precise as possible or they will not stack correctly.

To build their straw bale house, the Switzers first laid treated 4 by 4-inch posts around the perimeter of the home. Tar paper was placed between the posts with a bed of gravel to form a moisture bed. Windows and walls were strategically placed to brace the house, and the corners were beefed up for stability. The next step was to stack the bales around the perimeter of the home as tightly as possible. Once the bottom layer was laid, the remaining bales were stacked alternately, much like building blocks or Legos. A chainsaw and hedge trimmer were used to trim the bales to make them fit.

To keep the bales in place and provide added stability, 2-by-2-inch wire was placed on the outside and inside of the walls. The wire was then sewn together through the bales with wire. Next came the sheetrock, then the fun began-the stucco! Once again, Creath put Laura in charge. "She's pretty good at stuff like this. All I am is a strong back and a weak mind," he said. Creath would do all the preparations and heavy lifting on the days he was off work, and Laura would do all the stucco and finish work. "I built up some pretty good muscles doing the stucco," Laura said. "That was probably the hardest job of the entire house."

Laura likes to use salvaged items as much as possible, and using someone else's junk as her treasure is somewhat of a hobby for her. For instance, she has been collecting old doors from all

are-foot, one-room house 200 to \$300 per month. g in has been \$36.'

Creath Switzer

around the country for a number of years now, and used them throughout the house. The doors for the master bedroom's closet came from Mexico. The kitchen island and some of the decorative additions are made from old wood from houses that were being torn down in Blanket.

The home is now close enough to completion that they are able to live in it as they complete their project. Already, they are amazed at the energy efficiency of the home. "We were living in a 400-square-foot, one-room house, and our bills were running \$200 to \$300 per month. Our highest bill since moving in has been \$36," Creath said. When I asked how often the air conditioner comes on, they said it has not come on yet. The house consistently stays at about 74 degrees. The Switzers estimate the savings calculation over the life of their home to be approximately \$9,000 over a 30-year period.

I asked the couple if they would do it all over again. Laura's answer was, "I would say yes, I would build a straw bale house again. I think it is a unique and beautiful home. Although it was labor-intensive with a lot of sweat, testing of my patience and even a few tears shed, we had great support and help from our family and friends. We couldn't have completed this without them."

Creath, on the other hand, had a bit of a different view. His answer was, "I am amazed at what Laura and I accomplished together. Most marriages would not have survived, as close as we worked together. We are truly blessed with a beautiful and efficient home. But, if I had to do it all over again, I think I would just live in a tent."



TOP: It was Laura's job to stucco both the inside and outside of the home. Laura said the stucco was the most time-consuming and difficult job of the entire project. 'I built up some pretty good muscles doing the stucco,' she said. MIDDLE: The stucco is applied, and once the house is painted, it will look much like any other conventional home. BOTTOM: Inside the house, beside the living room door, Creath and Laura installed a 'truth window.' After the home is completed, visitors will be able to see inside the walls and observe how the home is constructed using the bales.

Taming the Trees

O f all the possible causes of problems with the delivery of electricity on CECA's system, trees rank near the top. If left unchecked, the ones close to power lines could make contact with the lines and siphon off electrons in a phenomenon we call line loss. And in a storm, the trees or their limbs can fall, breaking poles and bringing the lines down.

Keeping the rights-of-way for those lines clear is an ongoing process at electric cooperatives across the state. Annually, CECA spends a considerable amount on efforts to keep vegetation out of the rights-of-way. We have crews whose job is to inspect the lines, looking for problem trees or brush and trimming or cutting them down.

As a member, you can play an important role in helping those crews do their job more efficiently. If you know of a tree that's growing into a power line or looks like it could fall into lines, please call us at (325) 356-2533 and let us know.

If trees on your property need attention, and you are planning to cut them down, please be safe. Don't operate chainsaws or other tools near electric lines. If the tree or its limbs are close to lines, don't try to do the job by yourself. Hire a professional or call CECA for help or guidance. We may even be able to disconnect power to a line to make your work safe.

If you are planning to plant new trees to replace ones that have died, make sure you take power lines into account. Keep even small trees (ones that grow to less than 25 feet tall at maturity) at least 25 feet from power lines. Tall trees (ones that grow to more than 40 feet tall at maturity) should be no closer than 60 feet from lines.

Give power lines a wide berth where trees are concerned.

PLANT THE **RIGHT TREE** IN THE **RIGHT PLACE**





MARK YOUR Calendar

Are you making plans to attend CECA's 74th annual meeting at the Comanche City Park? If you didn't attend last year's annual meeting, you may not be aware that this year's date has been changed to October.

At the 73rd annual meeting in August 2011, the membership voted to move the meeting, in hopes that the weather in October will be cooler and somewhat more predictable than August.

So mark your calendar for CECA's 74th annual meeting at the Comanche City Park on October 13, 2012. We hope to see you there!