

# Tested by Fire



## Nebraska's Hall Angus Ranch faces fire.

by Kelli Fulkerson

**T**hroughout 2012, the United States withered due to a massive drought. According to the National Climatic Data Center (NCDC), the year 2012 made history with the largest percentage area to experience moderate to exceptional drought in 13 years of U.S. Drought Monitor (USDM) records (see Fig. 1). It is the largest area to experience moderate to extreme drought since the 1950s based on the Palmer Drought Index (see Fig. 2).

According to the NCDC, approximately 57% of the continental United States was in moderate to extreme drought at the end of August. The last time drought was this extensive was in December 1956, when approximately 58% of the continental United States was in moderate to extreme drought.

Such extreme conditions heighten the chance of a wildfire.

“Scorching temperatures and high winds are lighter fluid for wildfires,” said Mike Wight, Nebraska Emergency Management Agency spokesman. “There is little that we can do when a storm rolls in and lightning

strikes. We just have to have our teams and everyone we can on call.”

Lightning indeed ignited a north-central Nebraska wildfire near Hall Angus Ranch of Bassett, Neb.

### The ranch

Hall Angus Ranch was established in the

spring of 1960, when Ed Hall and his sister, Carolyn, purchased 20 cows and one bull from a producer in Iowa who was dispersing his herd. In 1966, Ed married Betty (Anderson) who was raised on the M Lazy M Hereford Ranch in Egbert, Wyo. They were blessed with three children — Les, Kyla and Craig.

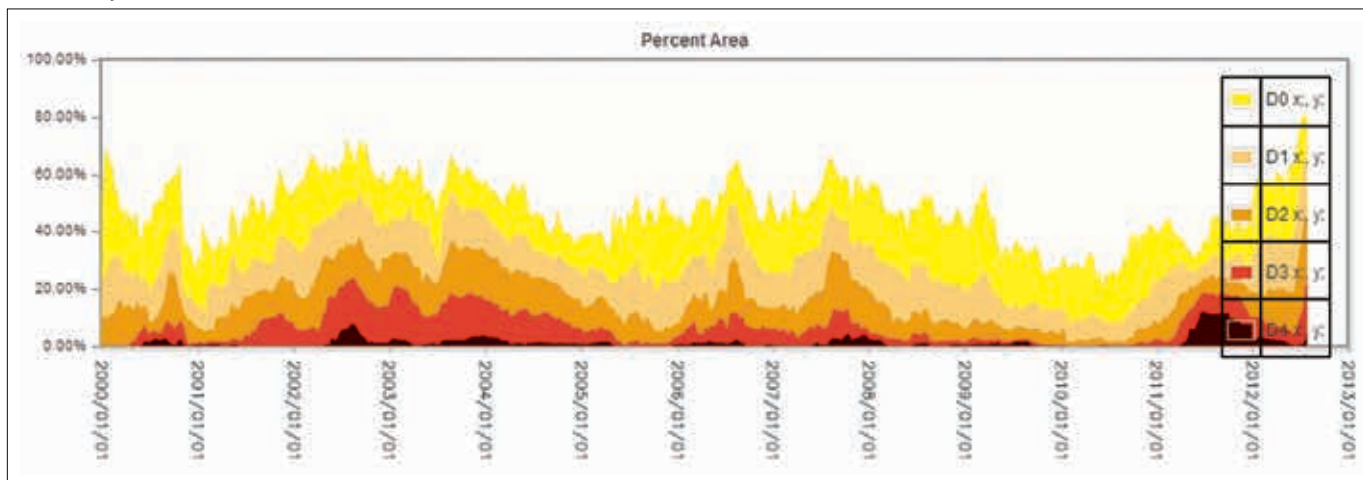
► Ed Hall surveys damage from the fire that roared through his family's ranch in an hour and a half.



► **Above:** Scorching temperatures and high winds served as lighter fluid for wild fires this summer.



**Fig. 1: 13-year U.S. Drought Monitor (USDM) record**



Les, wife Rachel, and son Craig ranch full-time with Ed and Betty near Bassett. Daughter Kyla with her husband, Peter, and daughters Abigail, Katie and Emma ranch near Sargent, Neb. Their youngest son, Craig, lives in New York City and is an editor for the *Anderson Cooper Show*.

The Halls take great pride in their Angus herd's heritage. The herd was closed until 1971, when they began to sell bulls private treaty. They sold by private treaty until 1980, when their supply increased to a substantial level and they began hosting a March bull sale at the Bassett Livestock Auction in Bassett.

When conditions this past summer made wildfire a significant threat to their 50-year-old operation, the Halls knew it was time to get prepared.

**Preparation**

With 20- to 30-mile-per-hour winds and 110° F weather, the authorities knew it was time to take action.

"Every day conditions were getting hotter and drier than the day before," recalled Ed. "We knew that if a storm blew in, we were doomed. However, we didn't know that when there is enough dust accumulating, and it gets hot enough, it will rise into a cloud and form its own lightning."

The Bureau of Land Management (BLM) stepped in, as well, and began to map out every building and structure within a 25-mile radius, said Ed. From there it was time for families and livestock to evacuate.

"It's truly a guessing game," said Ed. "You move the cattle from what you consider to be the high-risk area and pray to God that a spark doesn't ignite elsewhere."

Prior to the talk of wildfire, the Halls had contracted 200 fat steers to be shipped the first week of August. Ed knew there was a limited amount of pasture that he considered "safe" and made the call to

ensure they would take another 100 head for August contract.

"At a time like this, prices and contracts are irrelevant," said Ed. "Of course you hope for the best, but it is a state of emergency, and all you can do is hope that they will understand."

With 300 calves contracted and shipping out, they moved fall calves and cows to a pasture that sat high above the rest of the canyons.

"You have to get cattle out of danger. The best way to do that is on flat land," said Ed. "They can run across flat land if a fire spreads. It's almost impossible for them to climb their way out of a canyon if a fire is burning on all sides."

In addition to getting livestock out of

danger, the family prepared to relocate themselves. The first evacuation order came late in the afternoon, and Betty was ready. In an interview prior to her death Aug. 19, Betty said she took little from the house.

"All I wanted was to know that my family and friends were safe," she said, noting material goods could be replaced.

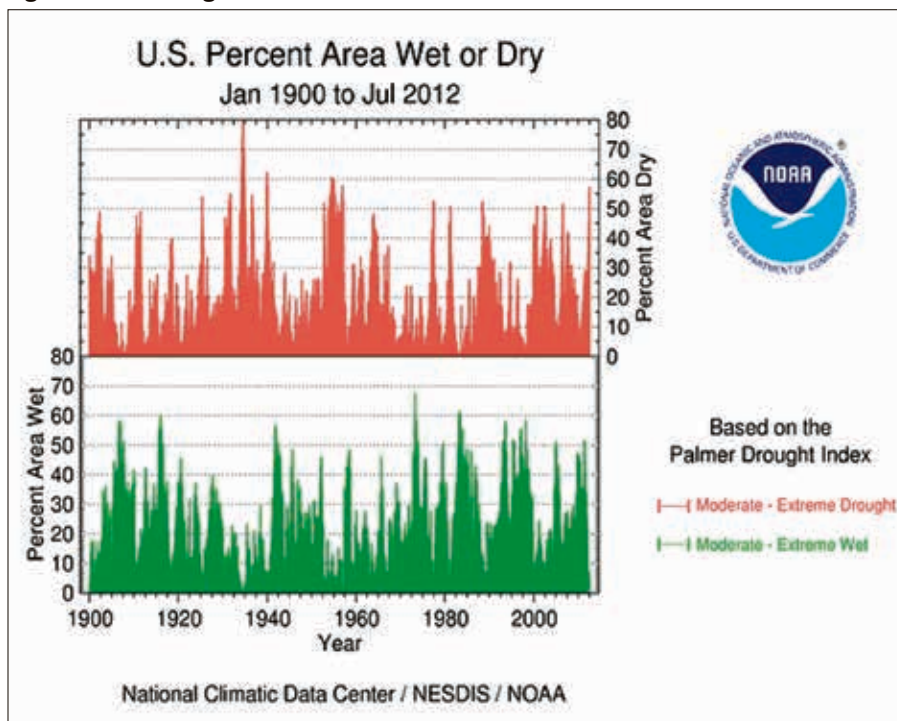
"My 6-year-old granddaughter did, however, learn a new phrase during the evacuation," Betty said. "When Grandma says evacuation, it means get the heck out of this house!"

**The flames ignite**

Ed said he can remember only one other year, 1956, when conditions were as dry and

CONTINUED ON PAGE 174

**Fig. 2: Palmer Drought Index**



## Tested by Fire CONTINUED FROM PAGE 173

the threat of fire was as great. This year the threat became reality.

On July 21, 2012, a dust cloud created enough heat to produce its own lightning and ignited 75,000 acres of north-central Nebraska.

When the wildfire was reported, fire crews began to flood the area. Crews from all over the state of Nebraska joined forces to combat the fire. The BLM and National Forest Service ordered in an elite crew of specialized firefighters called hot shots to assist local fire departments that were overrun.

“In an instance like this, you don’t have time to think; you just do,” said Ed.

According to the National Fire Service, there are three main options to successfully put out a fire of this magnitude: water, chemical retardants and isolation.

Water works in two ways. First, when they come into contact, the water and fire vaporize, resulting in the vapor displacing oxygen and leaving the fire with an insufficient combustive agent to continue burning. Eventually the fire dies. Secondly, the vaporization of the water absorbs the heat and cools the smoke that could act as potential fuel. According to the Nebraska Department of Natural Resources, water was accessed from the Niobrara River, and delivered to the fire by truck, dropped from aircraft tankers and personal water vehicles.

“When the helicopters and aircraft tankers are flying over your house from the river, it



► In the process of building firebreaks, the bulldozers and discs reseeded pastures, Ed says.

literally sounds like a war zone,” said Betty. “They were calling in crews from as far west as Rapid City, S.D., to deliver water and chemicals to the scene.”

The second method is asphyxiation of the fire. This was done by using a chemical product that reacted with the fire in hopes of reducing the severity. In addition, there was a layer of water-based, fire-retardant foam that was projected onto surrounding structures to keep the oxygen in the air separated from the fire. The Nebraska Department of Natural Resources ensured that all chemicals used in fighting this fire were environmentally safe.

The last method is isolation, also referred to as a firebreak or fire line. A firebreak is typically a gap in vegetation that acts as a barrier to slow or stop the progress of a wildfire.

Since there were no natural firebreaks in the area, the BLM had to create a man-made fire line. This was done by disking up the soil and then having a bulldozer come through and push the extra brush and soil into a pile to act as a barrier and prevent the fire from spreading. This is also where the hot shots came into play.

“There were easily 150 men and women walking the outskirts of the fire,” said Ed. “We did our best to bring them food and water to keep their strength high during this fire.”

### Aftermath

The Bassett Chamber of Commerce reported that the self-formed cloud ignited a wildfire that engulfed 75,000 acres. Hall Angus Ranch was a victim of that fire, battling for 2,750 acres and losing 1,300 acres

in an hour and a half’s time.

The fire ruined 1,500 miles of fence, which will cost an estimated \$8,000 per mile to repair.

“We will improvise with our fencing. Thankfully we didn’t get the brunt of that challenge,” said Ed. “I feel bad for the small producers in the area. They easily lost 90% of their pastureland, and I don’t know as if they will ever be able to recover.”

In terms of feed, the Halls are lucky with their supplies.

“I knew after last year’s severe drought in the southern U.S. that we needed to stock up on feed, so I made sure to ration my grain and hay throughout the winter and spring,” Ed explained. “I will have enough carryover to make it through this year just fine; however, if it stays this dry next year, I will need to make some drastic changes in order to survive.”

The other nice part about the bulldozers and discs coming through to create the fire line is the reseeded of pastures they do in the process, said Ed. He provided pasture oats, upland grass varieties and millet for the workers to disc into the firebreak in the pastures.

There is no way to prevent a natural disaster, Ed said. All we can do is look forward to the future and keep implementing new and improved technologies to further the cattle industry.



**Editor’s Note:** Kelli Fulkerson, a student at South Dakota State University, interned for the Angus Journal in summer 2012.



► Fire damaged 1,300 acres at Hall Angus Ranch. The estimated cost for fence repair is \$8,000 per mile.