Sonora Station Head Chronicles
Cedar Drouth Kill During 2000

SONORA — Dr. Charles "Butch" Taylor, superintendent of the Texas A&M Research Station here, reports that it got so dry during the summer of 2000 that a large number of cedar trees died. He's never seen that happen in his 30-year tenure on the station. The area also suffered a major grass die-off.

A research bulletin written by Dr. Leo Merrill just after the drouth of the 1950s reported that brush cover on the station was reduced to 56 percent of the amount present when the drouth began in 1950. Large cedar trees suffered a death loss of approximately 90 percent, hackberry nearly a 100 percent kill and liveoak death loss was 68 percent on deep soils.

Merrill also reported that Mexican persimmon increased from four to eight percent of the total woody plant cover during the drouth. The drouth appeared to be harder on woody plants than grasses and forbs.

"I call the 2000 drouth a summer drouth because we received above average rainfall for the year — 2.6 inches above the average," Taylor says. "Poor distribution of precipitation is what caused problems in 2000.

"We normally receive 15 inches of rain during the growing season and 7.6 inches during the dormant season. However, for 2000, we received only 8.6 inches during the growing season and 16.7 inches for the dormant season. Over the past 81 years, our rainfall data indicates that we've only had 10 years in which the winter precipitation equaled or exceeded the growing season precipitation."

Warm season precipitation, Taylor points out, is what determines carrying capacity. It helps grow warm season perennial grasses. Dormant season precipitation has little effect on carrying capacity but can have a significant effect on forage quality during the winter and is important for woody plant growth.

"I've heard a lot of talk lately that it doesn't rain as much as it used to or that our rainfall pattern has changed. If you look at our rainfall data, however, you'll see that the perception isn't necessarily true. Actually, we've done well in terms of precipitation, with the exception of the summer of 2000."