

Haying Wheat

The cold front that pushed through Tulsa County on April 6th has potentially caused freeze damage to a wide array of crops. Cereal grains (wheat, oats, rye, etc.) can be expected to suffer some freeze damage.

Most of the wheat in Tulsa County was in either the heading or boot stage of growth. Research tells us that for wheat in the boot stage, temperature needs to fall to 28 degrees F for at least two hours to cause significant damage.

Wheat in the heading stage would require temperatures of 30 degrees F or lower for at least two hours to cause significant injury. The Oklahoma Mesonet shows Tulsa County had a period of five hours with a temperature of 25 degrees during the cold front. Cereal crops can not be fairly examined for damage until four to five days after the freeze. Factors such as stage of growth, elevation, moisture, and crop variety will all have an effect on how much damage is suffered.

Cereal crops suffering excessive freeze damage preventing them from being beneficial for grain can be salvaged by ensiling or haying. The feeding quality of hay or ensilage is good through the soft dough stage of growth. Wheat, made into hay at the boot stage of growth will test 10 percent crude protein or higher. Expect wheat baled in the early dough stage to test 8-9% crude protein. Wheat baled or ensiled after freeze damage should be checked for nitrate to avoid toxicity to livestock.

For more information on freeze damage to cereal crops, or haying of cereal grains contact the Tulsa County OSU Extension Office at (918)746-3725.