Drought Can Turn Some Forage Deadly

BENTONVILLE, ARK.

Grasses that are normally a valuable forage can turn deadly when the rain stops falling and cattle producers need to think twice before turning herds out on to droughted pastures, according to personnel with the University of Arkansas System Division of Agriculture.

Phil Sims, Pope County extension staff chair for the Division of Agriculture, said he had a producer "called last summer after turning cattle into a cut-over hay meadow. He did not think about the Johnsongrass that had started re growing following a shower.

"He returned four hours later to find four dead cattle and two dying," Sims said.

When drought occurs, grasses can poison cattle two ways; with accumulated nitrates or prussic acid, also known as cyanide.

Sudangrass or sorghum-sudan hybrids accumulate nitrates. When the grass is eaten, the cow's digestive process converts the nitrate to nitrite. Nitrite can bind to red blood cells, preventing them from carrying oxygen to tissues. The animal eventually suffocates.

In addition to packing nitrate, Johnsongrass can kill another way.

"I've taken samples of johnsongrass hay that will top the relative feed value chart, while also cranking out an excellent yield," said Robert Seay, Benton County extension staff chair for the University of Arkansas System Division of Agriculture. "However, the same heat and drought conditions that help highlight favorable johnsongrass traits also elevate the level of prussic acid, or cyanide in the plant.

"Fortunately this toxin dissipates when johnsongrass is cut and cured as during normal haying," he said.

John Jennings, professor-forage for the University of Arkansas System Divison of Agriculture said Johnsongrass and sorghum have the highest prussic acid potential when the plants are less than 18 inches tall, or when wilted from drought or frost. "Current conditions have caused short and wilted plants which increases toxicity risk," he said.

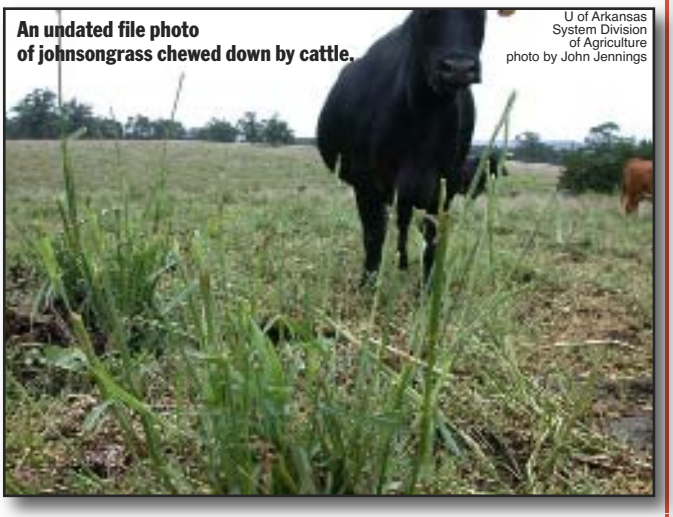
Another grazing hazard in times of drought is perilla mint, rattlesnake weed, or purple mint.

A member of the square-stemmed mint family, that trait, in addition to its strong mint fragrance, makes it easy to identify even when growing in the thick of other assorted weeds. In the Ozarks, mint weeds are like rocks, meaning they are easily found on most farms. Its rattlesnake name comes from the sound the seeds make when rattling around the dry seed head.

"Although cattle dislike mint, when preferred forages aren't available, grazing animals will eat it," Seay said.

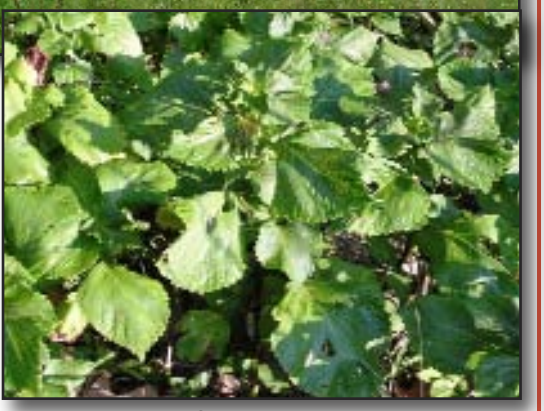
Wild cherry leaves are another hazard, said Johnny Gunsaulis, Washington County extension agent for the University of Arkansas System Division of Agriculture. Cherry leaves and stems may look inviting to cattle, but once wilted, they too contain a concentrated cyanide compound that can prove fatal.

"When producers run cattle in areas they hoped would be hayfields, the cattle are probably going to start ranging into the wooded areas more," he said. Δ



An undated file photo of johnsongrass chewed down by cattle.

U of Arkansas System Division of Agriculture photo by John Jennings



(Top Photo) **A clump of johnsongrass with seed heads stands out in in this field.**
U of Arkansas System Division of Agriculture photo by John Jennings.

(Above) **The perilla mint has a broad, tooth-edged leaf.**
University of Arkansas Division of Agriculture photo by Robert Seay.