

Harvesting Drought Stressed Corn as Forage

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Before directly grazing or mechanically harvesting the corn as forage, check the labels of all chemicals that were applied. Be sure all pesticides (herbicides and insecticides) applied to the crop are cleared for forage and the minimum harvest interval has been met. Also, check with the USDA Farm Service Agency to maintain compliance with USDA farm program provisions and crop insurance requirements before harvesting corn as forage.

Beef animals with some extra management can directly graze drought-stressed corn. If allowed unlimited access to the standing corn, experienced cows will seek out and eat mostly the ears. Slowly acclimate cattle to higher grain intake by feeding them increasing amounts of grain for a week or more before allowing them to begin grazing the standing corn. To minimize waste from trampling and to limit grain consumption, use an electric fence to limit access to what can be consumed in no more than two or three days. The fence should then be moved to open a new strip. When grazing standing corn, don't force animals to consume the lower stalk since it may contain higher levels of nitrates.

Harvesting corn with a silage chopper and feeding it fresh to cattle instead of first letting it go through the ensiling process is known as feeding greenchop. If drought-stressed corn is fed as greenchop, it should be fed immediately after it is harvested. Never allow greenchopped forage to heat in the truck or in the feed bunk because nitrate will quickly convert to nitrite. Nitrite can be ten times as toxic as nitrate when fed to animals. It is better to feed small amounts of freshly harvested greenchop two or three times daily rather than one large feeding per day to avoid heating that could occur in the feed bunk before the greenchop is consumed.

Feeding silage made from drought-stressed corn is preferred to direct grazing or feeding greenchop because ensiling reduces nitrate levels in the feed. During the ensiling process, one-third to one-half of the nitrate in the forage is converted and leaves the silage pile as a gas. The tendency is to cut drought-stressed corn for silage too soon, resulting in silage with excess moisture. This results in poor fermentation and reduced feed value. If the moisture content is above 70 percent, either wait to harvest, windrow the corn and let it wilt before chopping for silage, or mix silage with dry ingredients like cracked corn, dried distillers grains, or ground hay.

It's important to test forages before using them in a ration. Feedstuffs that test high in nitrates can be used as part of a ration if they are diluted with lower nitrate feeds. Blend the feedstuffs so the total ration does not exceed the potentially toxic threshold level.

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