

To: Local News
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Management Options For Stressed Corn

Where dryland corn has been under severe drought and/or heat stress, producers have to decide whether to let it go and hope for some kind of grain yield, salvage the crop for silage or hay, or leave the crop in the field for its residue value.

Economically, should you leave the corn, cut it for silage or hay, or leave it for residue?

As for the silage/hay vs. grain decision, if the [yield potential](#) is less than 25 bushels per acre, it's probably best to cut it for silage or hay. If the yield potential is 50 bushels or more, it's probably best to harvest it for grain. If the yield potential is between 25 and 50, the decision will depend on the price of corn, the quality of the silage, and on a producer's ability to use or sell the silage.

Of the two options for dryland corn that has limited yield potential – silage or hay -- silage is normally the preferred option. However, you need the facilities to make silage (or sell it to someone who does), and there must be enough moisture in the plants to properly ensile. And where there's no ear at all, silage may not be a good option. Where the ear is very small, or has poor seed set, the silage will have lower energy value (TDN) and lower overall forage quality than normal. Even at normal yield levels, silage quality begins to decline when grain yield drops below roughly 150 bushels per acre and continues to decrease as grain yields keep going down.

To cut corn for silage, you need 65 to 75 percent moisture in the plant. If plants are suffering from drought, they may have lost some of the bottom leaves. The top leaves may have browned off or turned white. In that case, the plants probably do not have 65 percent moisture, depending on how much moisture is in the stalk. Where that's the case, your only option is probably to chop and graze, or hay the crop like a summer annual forage. The pasture/hay shortage that exists in some areas of the state may make haying the failing corn crop a more desirable option this year.

When chopping or cutting for hay, stalks should be cut at least six to eight inches off the ground to avoid nitrate toxicity made from drought-stressed corn. A forage nitrate test costs only \$5-15 and it's the only sure way to make sure the hay is okay to feed to cattle. Ensiling the corn, if possible, is preferred to chopping or grazing because of that potential for nitrate toxicity.

If you plan to have cattle graze the corn field after it has been chopped or cut for hay or silage, watch for any shattercane or Johnsongrass that comes up after a rain. New regrowth from these sorghum-type plants after a drought can be dangerously high in prussic acid.

How much silage can producers get from drought-stressed corn?

A publication from the North Central Universities estimates that for corn that has been stressed, with limited grain yield potential, producers can expect about one ton of silage per acre for every five bushels of grain yield. For corn that is not stressed, producers can get about one ton of silage for each six to seven bushels of grain yield. If little or no grain is expected, a very, very rough pre-harvest estimate of yield can be made by assuming that one ton of silage can be obtained for each foot of plant height, excluding the tassel.