Dryland Crop Management Strategies During Prolonged Drought in the Texas High Plains

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Hay

Under a prolonged drought it is generally much easier to produce a forage crop than it is grain. For this reason hay production should be considered. This year the shortage of hay in the State could result in good hay prices. A forage crop may also serve as a bridge for cattle grazing on summer pasture to wheat pasture.

Main Options:

✓ Sorghum-Sudangrass
  Can be planted up to August 10 and still make a good forage crop. Can be grazed or bailed. Under drought conditions nitrate and prussic acid can reach dangerous levels for livestock.

✓ Pearl Millet
  Can be planted up to August 10 and still make a good forage crop. Can be grazed in as little as 30 days after planting. Advantage over sorghum-sudan is that prussic acid is not a concern.

Fall Planted Wheat

If wheat can be planted no-till, do not plow fallow ground or wheat stubble unless a significant weed population is present. If weeds are present use a sweep plow for control. Herbicides will generally not work well when weeds are stressed due to a lack of moisture.

If no-till planting is not an option, consider preparing land early for planting so that when rain occurs the field can be immediately planted.

Planting dates for dryland wheat range from August 20th to November 1st, with September 20th to October 10th being ideal. Under present conditions, wheat will likely need to be planted as soon as adequate rainfall is achieved after August 20th. Wheat planted earlier will generally not do well because of warm soil temperatures.

If wheat seed is needed to be planted deep in order to reach moisture, consider planting a variety such as Tam 107 that has a long coleoptile and thus will emerge from deeper planting depths than other varieties.

Good quality seed will emerge better under drought conditions. For this reason plant seed with a good test weight. This year there should be plenty of high test weight seed available.

Next Years Sorghum Crop

If sorghum is to follow this years wheat crop leave the wheat stubble standing as long as possible in order to conserve moisture. Do not sweep plow until a significant weed population develops. If possible, leave stubble standing until next spring. No-till planting into wheat stubble should also be considered.

Choose sorghum varieties that have good drought tolerance and good stalk strength. Seeding rate can be adjusted to match to amount of soil water stored at planting time. Generally 34,000 seed/acre is adequate to produce a good grain yield. If soil moisture is depleted seeding rate should be reduced.

Planting can be delayed until July 1st if adequate moisture is not present. When planting is delayed a shorter maturing hybrid must be planted.

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