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CLIPPINGS

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For Immediate Release

Preparing for Harvest

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August is the critical month for corn and by the end of the month, we should have a good idea of how much corn we will need to store and dry. At this point, the crop in Northwest Iowa looks very good.

The yield potential in corn can be estimated by using the following grain formula:

- Yield Potential (bushels/acre) = plants/1000 acre x kernels per ear

The plants per 1000th of an acre can be calculated by counting the plants in a:

- 40 (row width): 13.1 ft/1000 acre
- 38 (row width): 13.8 ft/1000 acre
- 36 (row width): 14.5 ft/1000 acre
- 30 (row width): 17.4 ft/1000 acre

Kernels per ear is calculated by counting the rows multiplied by the kernels per row. I always grab the tenth ear when I am counting the population, so that I don't grab the biggest ear. A typical calculation might look like this:

$$= \frac{(25 \text{ plants}/1000) \times 14 \text{ rows} \times 40 \text{ kernels per row}}{89.6}$$

$$= 156 \text{ bushels per acre}$$

This estimate should be done at several locations throughout the field to get a good average.

Now it is time to estimate how much drying we will need. The rules of thumb for calculating drying corn are:

- High Temperature Drying: 0.018 gallons of propane gas per point per bushel
- Natural air takes about 0.33 kWh (kilowatt hours) per bushel per point

If we typically dry our corn 6 points, it would take 0.108 gallons of propane per bushel or about 2 kWh hours for natural air, if I have done the math correctly.

So, if we use our yield of 156 x 0.2 gallons of propane gas per bushel, we would expect to use 31 gallons of propane to dry the 156 bushels of corn with natural air. The electricity used would be about 156 x 2 kWh or 312 kWh per acre. From this, we can check with our suppliers to see who will give us the better deal on energy. Heated air will often be more expensive, but is faster.

The best part of all is that at this point in the year, the yield looks to be above average, and it will mature ahead of normal and be dryer than normal at harvest time. This is the best of both sides of the equation. Happy figuring and let's get ready for a good corn harvest!

-30 -

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