

# THE FORAGER

*Agronomics with livestock in mind!*

## REPLANT or NOT?

### Consider These Factors First...

#### Situation ~

If your cornfields have been damaged by heavy rain, hail, pests or poor emergence, you may consider replanting.

#### Factors to consider ~

- Yield potential of existing stand
- Availability of earlier-maturing hybrids
- Yield potential of replanted corn
- Weed control implications
- Replanting date
- Grain moisture content at harvest
- Replanting costs
- Crop insurance adjustments

#### Action plan ~

**Step 1: Calculate yield loss from less-than-optimum plant population** - To estimate yield loss due to stand reduction, first *determine the plant population* of the existing stand. Then refer to Table 1 to determine the yield loss based on the existing plant population. In the example highlighted in this table, assuming an optimum plant population of 30,000, a grower can expect a yield loss of 6 percent when plants per acre drop to 26,000.

**Step 2: Factor in additional yield loss for non-uniform stands** - Uniformly spaced plants produce more yield than *unevenly spaced plants*. Large gaps of 2 feet or more in a stand can reduce grain yield by about 5% in populations of 14,000 to 28,000 plants per acre. If plants are uneven, add another 5% to the estimated yield loss due to stand reduction.

**Step 3: Estimate yield loss due to later replanting date** - Using Table 2, determine the expected yield loss for a later-than-optimum planting date. For example, with a replant date of May 30, a grower could expect a yield reduction of 17%. Optimum planting dates vary by location.

**Step 4: Compare yield potential to determine if replanting is worthwhile** - Using the examples cited, a grower could expect a yield loss of 6% due to stand reduction and a loss of 17% due to delayed replanting. Therefore, the yield potential of the replanted corn does not outweigh the yield potential of the existing stand and the grower would probably choose not to replant.

**Step 5. Other considerations** - If corn is severely damaged, another option to consider is switching to a later-season crop. If you do choose to replant, a local crop consultant or agronomist can help select hybrids with shorter relative maturities appropriate for your area.

*(Continued from previous column)*

#### Summary ~

When faced with a replant situation, analyze all factors to determine whether the yield potential of the replanted corn will offset the cost of replanting.

For more information, insights and agronomic assistance, contact the Renaissance Agronomy office.

*Table 1: Grain yield-loss based on plant populations for corn planted prior to May 1*

30,000 +	0
26,000 (Example)	6
22,000	12
18,000	21
14,000	33

*Table 2: Grain yield-loss based on corn planting dates*

Planting Date	Percent (%) Grain yield-loss
April 25	0
April 30	1
May 5	3
May 10	6
May 15	9
May 20	12
May 25	14
May 30 (Example)	17
June 4	23
June 9	29
June 14	35

*Charts used in this bulletin were derived from [The Corn Growers Field Guide for Evaluating Crop Damage and Replant Options](#), a fact sheet produced by the University of Minnesota. Exact plant populations and yield losses due to stand reductions may vary by geography.*

*(Edited from an article by Mycogen Seeds/Dow AgroSciences)*

## SEED – AGRONOMY - NUTRITION

Contact our Agronomy Office for Information & Support

**1.800.346.3649**



*(Continued in next column)*