

## Forage Management

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### Corn silage harvest toolkit: 2021 edition

Joe Lawrence

Each corn silage harvest season presents its own unique opportunities and challenges. The following is a summary of considerations and resources to consider in preparation for a successful corn silage harvest.

#### 2021 Opportunities

- Lower overall rainfall generally results in improved corn silage fiber digestibility
- Above average heat increases likelihood of harvest before “mud” season
- Adequate moisture around and after pollination aids ear development which could improve starch yield and overall yield.

#### 2021 Challenges

- Early Season drought conditions may compromise yield
- Rainfall around pollination and weather induced stress may increase risk for mold and mycotoxins
- Weather stress may lead to variation in crop maturity and optimum harvest timing
  - Pay close attention to **whole plant dry matter (DM)** for harvest timing decisions
    - Article: [Record Silking/Tasseling Dates for Corn Fields](#)
    - Article: [Sampling for Moisture Content in Corn Silage Fields](#)
    - Factsheet: [Corn Plant Dry Down](#) NEW
- Corn Silage harvest is always a stressful time around the farm, review Safety with your team before harvest season begins.

There are many keys to corn silage harvest and while they are important every year, there can be an added importance in a year when concerns may persist regarding sufficient forage inventories as every pound of forage you can successfully preserve counts more than ever.

### Storage Planning

It is never too late to think about your silage storage resources. Plan ahead to assure that storage space is adequate for the tonnage that needs to be stored, improper storage setup and overfilling storages lead to significantly greater shrink losses. It is also important think about separating forages by quality to optimize their use by different animal groups. Article: [Strategic Forage Storage Planning](#)

### Harvest Planning

There are a number of competing interests this year in terms of balancing forage inventory needs and potential weather-related yield challenges with high commodity prices and opportunities to offset purchased feed cost with forage quality.

- Work with nutritionist and other key team members to determine goals for corn silage.
- Determine forage quantity needs and how many acres are needed to meet this goal.

- [Spreadsheet Tool: Forage Acreage Needs Calculator](#) NEW
- Forage Quality and Commodity Prices
  - Article: [Managing Forage Digestibility to Combat High Commodity Prices](#)
  - Article: [Back of the Envelope Economics \(Starch Contribution from Corn Silage\)](#) (Miner Institute)

## **Set-up Harvester for optimum performance**

The corn harvester plays an integral role in optimizing your corn silage. Careful attention needs to be paid to corn silage processing score and length of cut throughout the harvest season. See our [Kernel Processing Information Series](#) for information from a recent study completed in NYS with funding from NYFVI.

- Make sure the chopper is properly set up before the season starts
  - Factsheet: [Corn silage kernel processing](#)
- Chopper performance changes as field/crop conditions change. Monitor continuously
  - Factsheet: [Effect of corn plant characteristics on corn silage processing scores](#)
- Set Kernel Processing goals based on green samples, consider potential improvements during fermentation a bonus.
  - Factsheet: [Impacts of fermentation](#)

## **Preserve every pound of DM you harvest**

When there are concerns about adequate feed inventories there is no room for excessive shrink (spoilage losses). Monitor fields and harvest at the correct whole plant DM and make every effort to ensile the crop properly, particularly when using bunks and piles as shrink losses can be the highest in these storage systems.

- PACK! PACK! PACK! – work to achieve a high density by properly packing the silage
  - Reduces shrink losses
  - Improves feed quality
  - Increases storage capacity
- Consider the use of scientifically backed bacterial inoculants
- Immediately cover forage with plastic
  - Oxygen barrier products are worth the investment