

BADGER MEMO



November 2020

UW-Seed Farm Issue

The November edition of the Badger memo is brought to you by the UW-Seed Farm.

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2020 Harvest

The UW Seed Farm harvest concluded on the 10th of October. A big thanks to Roy Galenberg and Loren Barske for coming to the farm before harvest to help answer questions and give advice on how to tune the air head on the Seed Farm's Harvester! As a result of their suggestions, Seed Farm staff were able to dig in less than ideal conditions. The potatoes also came into the warehouse much cleaner.



Above: Field crew members Left to right: Alex Crockford, Bob Arndt, Larry Hiltunen, Riley Hitchcock, Matt Cogger. Photo: Alex Crockford



Above: Grading and warehouse crew members Front right to left: Pam Horneck, Travis Eckardt, Sean Malone. Back right to left: Jessica Graper, Arlene Weisensel, Pam Zielke. Not pictured Keith Heinzen. Photo: Alex Crockford

Harvest wouldn't have been possible without the hard work of the Seed Farm Staff. Digging and grading was especially difficult the last week of September. Intermittent showers along with cold damp conditions made for some long days on the grading line and in the field.

Growing Season Update

In 2019 the farm purchased a Spudnik Eliminator grader- which was completely rebuilt and connected to a 3-phase panel was installed at new warehouse (see other story).

After some fine tuning, the farm's Spudnik Eliminator worked well to remove dirt and rocks from the potatoes. The increased capacity of this machine greatly improved the process of filling the warehouse. During harvest it became apparent that some additional modification to the Eliminator was needed. The modifications will be made so the Eliminator will be ready to go for the 2021 harvest.

New Staff Member Profile

The Seed Farm would like to welcome Bob Arndt to the program, Bob started full time on September 1st. He grew up on a dairy farm in the south-west corner of Wisconsin and has a lot of experience in agriculture.

In the 1980s he worked in the seed corn industry for 14 years producing field corn seed and seed for Rural Route 1 popcorn. After that he worked at an Agronomy center in that handled fertilizer, seed and feed for another 14 years. During this time Bob also operated his own farm growing 300 acres of corn, soy beans and wheat near Fenimore Wisconsin.

Prior to joining the seed farm Bob worked as a truck driver for Sloan implement delivering farm equipment all over the country. After seven years with Sloan implement Bob and his wife Rhonda relocated to the Eagle River in November of 2019.



Above: Bob, his wife Rhonda and their grandson. Photo Bob Arndt

Bob and Rhonda have five children and six grandchildren. Outside of work Bob enjoys wood working, fishing and John Deere tractors.



Above: Riley Hitchcock and Bob Arndt make adjustments on the Spudnik Eliminator. Photo: Matt Cogger

Other Seed Farm Changes

- The box-filler has seen significant maintenance to extend it's life.
- Thanks to **Hafner Seed Farms**, for a donated a grading line that has since been sand-blasted, painted with all new bearings and hardware.
- The Seed Farm's harvester received new bearings, sprockets, chain, two belted chains and a different engine.

Seed Farm Equipment Requests

The Seed Farm is interested in purchasing/obtaining the following pieces of equipment.

- Roost boxes to construct holding tanks
- Zimmatic Pivot Tower and parts

Humidicell Installed at State Farm



Above: Humidicell Installation. Photo: Alex Crockford.

After several years focusing on the greenhouse facilities, over the last year we've begun modernizing our storage and warehouse and shipping practices/equipment, this has included upgrading the plenum fan motor size, installing a VFD, and upgrading the 20+ year old BTU panel with a BTU XT. In August, Alex worked with program staff and Nelson Vegetable Storage Systems to install a 12' tall by 4' wide humidicell into the warehouse plenum. The project involved moving approximately 8' of plenum wall and sealing around the humidicell. The plenum quickly raised the humidity from 70% to 90% prior to harvest and it now hovers around 92%.

The humidicell provided for longer night run times and maintained humidity at both higher and steady levels through harvest. Attached is a graph showing average plenum humidity for the last two growing seasons over a 30 day time period, with orange line as the current season. The troughs in the graph are days with outside air temperatures exceeding the warehouse temperatures both day and

night.

Average daily humidity during harvest was 90.8% versus 86.9% the year prior. The hourly variability in humidity was much lower in 2020 than in 2019, with approximately half of the variation than in the previous year (tabulated around the clock.) The old spinners have been repurposed and are being used to add humidity to overflow potatoes temporarily being held in our old grading room.



Above: Completed humidicell installation. Photo: Alex Crockford

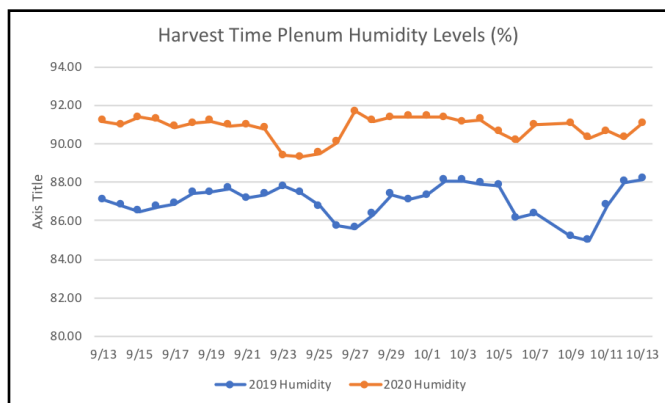


Figure 1. 2020 Harvest Plenum Humidity Levels. Compiled by Alex Crockford

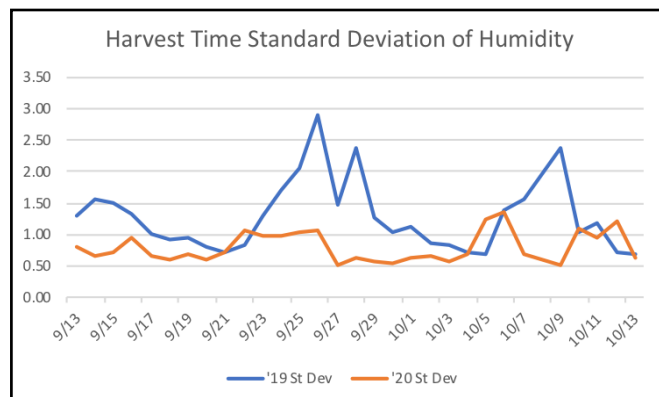


Figure 2. 2020 Harvest Time Standard Deviation of Humidity. Compiled by Alex Crockford

Upcoming Events

November 5	WSPIA Board Meeting, State Farm, 10:00 am, masks required
November 10	SpudPro Virtual Meeting, 10:00 am
November 13	State Farm Seed Request Forms Due
November 16	Planting Grow-Out in Homestead, FL
December 2	US Certification Meetings, Virtual
January 2	Grow-Out Readings Begin
July 15	State Farm Tour & Program