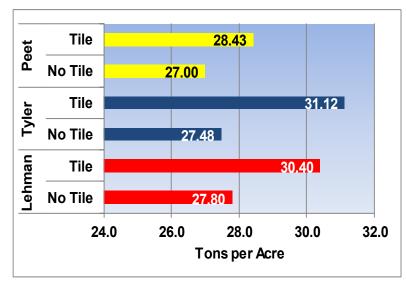


Planting Plastic Makes "Cents"...

Believe it or not, tile drainage was first introduced to American agriculture in 1838 by a farmer named John Johnston, who brought this unique practice across the pond from his native Scotland to his new farm in upstate New York. Johnston and his farm crew work persistently for the next several years on their drainage project until nearly 72 miles worth of clay tile on had been hand-dug and hand-laid his 320 acres of farmland. As you can imagine, many of his friends and neighbors thought he was completely nuts until they witnessed just how quickly his efforts paid off - Johnston increased his wheat yield from 12 bushels per acre to 60 bu/acre the very next year. What I find most amazing about this little bit of trivia is that almost 175 years later, history continues to repeat itself.



This past summer, the Minn-Dak Ag Staff started collecting tiling data as part of their annual Field History Sheets. This information has allowed the staff to make direct correlations between sugarbeets planted on ground with sub-surface drainage and ground without. Even though this analysis only represents one year of data, the results show the clear advantages of having tiled ground in your beet rotation.

The data presented summarizes the advantages of drain tile in three of the eight factory districts – Peet, Tyler and Lehman. Given their geographic location, these districts were selected to provide data from the Northern (Peet), Middle (Tyler) and Southern (Lehman) growing regions of Minn-Dak rather than one all-encompassing summary for the cooperative.

The graph and table provided offer a summary of the average yield parameters for fields with and without sub-surface drainage for the three districts in question. It is noteworthy to mention that drain tile did show a positive yield advantage in every single Minn-Dak factory district. Using the 2011 beet payment for the calculations, tiled fields within the Peet District (Northern Region) were found to have a 1.4 TPA advantage in comparison to "naturally" drained fields and a 610 lb. increase in recoverable sugar per acre. These two factors combined provided growers with sub-surface drainage an average payment increase of \$164/A. Even more impressive escalations were found in both the southern and middle

growing regions. Tiled fields within the Lehman District boosted the average per acre payment by \$310 thanks to increases in both tonnage (2.6 TPA) and sugar (1,154 lbs.) while similarly drained fields within the Tyler District boasted averages yield increases of 3.6 TPA and over 1,400 lbs. RSA (resulting in a \$376/A advantage). The choice on whether or not to drain tile is simple - Planting Plastic Makes "Cents."

Recoverable Sugar per Acre								
Station:	Peet	Tyler	Lehman					
Tile:	9,293 lbs.	10,065 lbs.	9,819 lbs.					
No Tile:	8,683 lbs.	8,665 lbs.	8,665 lbs.					
Difference:	610 lbs.	1,401 lbs.	1,154 lbs.					
Revenue Gained per Acre:	\$164	\$376	\$310					

10 Helpful Ag Apps for Your Smart Phone / Tablet...

Each and every day, over 46 million mobile applications are downloaded from Apple's App Store and nearly just as mainly from Google's Mobile Play Store. Although the ag-related apps are still far and few between (but are gaining ground), here are a few apps from each operating platform that you might find handy from time to time:

Apple iPhone / iPad



<u>FieldView:</u> This app is designed for the 20/20 Seed Sense monitor (Precision Planting). It functions as a 2nd display in the cab for real time, row-by-row maps of their planter's per-

formance. Take your device with you and you'll have all of the 20/20 data at your fingertips.



<u>Agrian Mobile:</u> View product labels and material safety data sheets for more than 8,000 crop protection products. Browse usage rates, rainfast, preharvest and re-entry intervals,

worker safety information and more.



<u>Tank Mix:</u> Allows users to calculate the amount of product or water needed to treat a specific field area, as well as the amount of product needed to the get the volume-to-

volume ratio required by many products.



<u>Growing Degree Day Calculator:</u> Measure the maturity of your crop by viewing growing degree days. This Growing Degree Days app measures the current and past growing degree

days data for your farm's location to help predict the date that crops will reach their final maturity.



<u>JD Link:</u> This equipment app from John Deere is a telematics system designed to remotely connect owners to their equipment, providing alerts & machine information including location,

utilization, performance & maintenance data to manage where and how equipment is being used.

Android Smart Phone / Tablet



<u>MapItFast:</u> This app is the easiest way to collect points, lines, polygons and geo-referenced photos on a high-resolution satellite image. It is very user friendly and works great for marking objects

within a field, calculating distance and area measurements, and mapping tile lines.



<u>Commodity Prices:</u> Stay up to date with the latest commodity spot prices. Track corn, soybeans, wheat, sugar, lean hogs, live cattle, feeder cattle and much more.



SoilWeb: GPS based, real-time access to USDA-NRCS soil survey data. This app retrieves graphical summaries of the soil types associated with the user's current geographic

location within a field.



<u>TeeJet Spray Select:</u> This app allows you to quickly & easily choose the proper nozzle tip for your for broadcast or fertilizer spraying application. Just enter speed, spacing and your target

rate, select your drop size category and you instantly have a list of tips that will work for your application in question.



<u>Bubble Level:</u> Turns your phone into a level. Hold any of the phone's four sides against an object to test it for plumb/level, or lay it down on a flat surface for a 360° level. While showing the

numeric value, the phone will then flash the light, beep, or buzz when level the object is level.

2012 Minn-Dak Farmers Cooperative Final Home Station Report										
Station	Acres Harvested	Total Tons	Percent Tare	Percent Sugar	Percent Purity	Tons per Acre	Sugar per Ton	Sugar per Acre		
Fact MN	19,762	523,817	1.31	19.40	88.29	26.51	323.64	8,578		
Fact ND	9,766	265,356	1.47	18.99	88.21	27.17	316.28	8,594		
Tyler	14,733	415,204	1.46	19.03	88.20	28.18	316.80	8,928		
Gorder	7,369	204,540	1.64	18.85	88.71	27.76	316.50	8,785		
Hawes	8,505	204,889	1.75	19.32	88.10	24.09	321.35	7,742		
Yaggie	14,987	371,339	1.67	19.14	88.17	24.78	318.49	7,892		
Lehman	13,177	378,972	1.69	18.81	88.46	28.76	314.32	9,040		
Lyngaas	9,174	225,559	1.36	19.32	88.18	24.59	321.71	7,910		
Peet	17,040	468,368	1.58	18.91	88.95	27.49	318.51	8,755		
Totals:	114,513	3,058,044	1.53	19.08	88.38	26.70	318.80	8,512		