

KERNELS OF LEARNING

Quarterly Personalized Education— Generation 5 Edition

Q3 2017

Babson Innovation

JT, Mary Elizabeth and Sarah, (Henry will join you all when he is a bit older and has email)

How cool is it that there is a whole website dedicated to the Surge Bucket Milker which is a big part of your family history!

During the 1800's many farmers dreamed of a milking machine to ease the chore of hand milking. Dairy farmers were beginning to milk more cows in larger herds. By the year 1900, hundreds of patents had been granted for milking machines but none of them proved to be worthy on the farm. Milking machines quickly developed a bad reputation for ruining good cows. One of the early milking machines was the Pine Tree Milker built by the Pine Tree Milking Machine Company—a marketing project of Babson Brothers.



Three brothers, Henry (your Great-Great-Great-Grandfather), Fred, and Gus Babson formed Babson Brothers Company in Chicago—a catalog mail order company similar to Sears or JC Penny. Henry was friends with Thomas Edison and they sold the Edison Phonograph, Babson Records, Burlington watches, clothing, shoes, and farm supplies. Mellote Cream Separators were the first dairy item Babson sold. Babson had the exclusive USA distributorship for the Belgium made Mellote separators. In 1916 Babson Brothers began manufacturing and selling The Pine Tree Milking Machine—an upright floor pail designed like many others of that time. While the overall milking machine design was similar to others, the Pine Tree pulsator outperformed any other pulsator made. Pine Tree pulsators were simple enough that the farmer could maintain them himself.

In the fall of 1922, Herbert McCornack invented the Surge Bucket Milker. He used a large roasting pan from his family kitchen as the base to design his new milking machine. This revolutionary milker would hang under the cow suspended on a steel spring rod that was attached to a leather strap over the cows back. The new Surge Milker used the proven Pine Tree pulsator.

The new milker had a natural surging action as the milker moved back and forward while milking; thus its name. This tug-and-pull movement was similar to the tugging and pulling of a calf eating. The new milker surpassed all their expectations. The biggest advantage was the ability to easily clean and sanitize the Surge. No long milk tubing to try and keep sanitary. Only 4 pieces of rubber to wash and only 4 inches from the cow to the pail.

We will continue to learn more about the Surge in future newsletters, stay tuned!

Resource: SurgeMilker.com

Celebration Corner!

- ⇒ Henry's 6th Birthday July 28th
- ⇒ Zeff & Andronica's Anniversary August 12th
- ⇒ Tim's Birthday September 14th
- ⇒ Dave's Birthday September 15th

Financial Sense

What things do you love to do?



Go shopping? Watch movies? Play sports? Ride horses? Give money to people in need? Or maybe someday, you would like to drive your very own car?

To do a lot of things we love, we almost always need to use money. In the next month Henry, Sarah and Mary Elizabeth will receive a neat toolkit that includes books, games, activities, a Smart Saver bank and more to provide a fun way to learn about working, giving, saving and spending. JT, your toolkit is geared more towards a high school graduate providing inspiration on making the most of your college years and real life pitfalls to avoid.

Your parents will be your best resource for questions on these things but hopefully this and future newsletters will provide you with some tips and habits for making smart money choices.



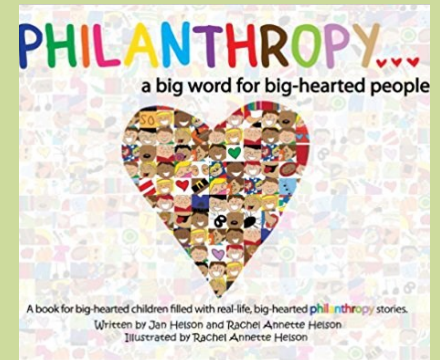
Spending Smarts Word Search

Money Management and Budgeting

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C	N	L	S	N	M	N	E	E	A	T	U	S	R
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F	M	C	H	E	C	K	S	A	I	D	G	C	B
C	I	P	B	U	D	G	E	T	N	E	N	E	M
N	H	N	L	I	E	E	I	Y	G	R	I	X	U
M	A	E	A	O	N	T	O	E	S	C	N	P	N
S	R	N	C	N	Y	C	P	N	E	X	N	E	E
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MONEY
PLANNING
CHECKS
CREDIT
FINANCES
RENT
EMPLOYMENT
BUDGET
INCOME
GOALS
EXPENSES
SAVINGS
NUMBERS
PAYMENTS
CHECKING
DEBT

Giving at a Glance



Giving back, being kind and being generous has always been a large part of the Babson family story.

In the last newsletter we introduced the book *Philanthropy... a big word for big-hearted people*, there are numerous real life stories of how young kids and teenagers have helped others and their communities in significant ways. This specific story seemed fitting since we just celebrated the patriotism of the 4th of July and is a great example of how a brother and sister have made a lasting impact for many.



In 2004 when Robbie and Brittany Bergquist (then 12 and 13 years old) heard the story of a soldier returning from Iraq with a near \$8,000 phone bill, they couldn't believe a man serving his country was unable to call his family for free so they decided to do something about it. With just \$21 and help from their parents, Cell Phones for Soldiers was born.

Today the nonprofit provides cost-free communication services and emergency funding to active military members and veterans. They have provided more than 300 million minutes of free talk time and have recycled 15 million cell phones for the cause.

unlock the secrets in the soil

Soil Productivity

By Eric Shearer- Babson Farms, DeKalb, IL

This year was, to put it lightly, a challenging year! The optimal planting windows were small, and the early window was followed with cold and rainy conditions, making things more difficult. The first planting window was April 22nd through the 25th, with the air temperature mostly in the 70s and the soil temperature around 56° F, ideal for planting corn. However, the forecast was predicting below normal temps and a series of heavy rains to follow. Some decided to postpone planting, hoping the weather outlook would improve enough for a more optimal planting window, but many were disappointed because that opportunity didn't come until the end of May.

Well-timed planting is important because it allows corn to take advantage of longer days and heat accumulation (GDUs-Growing Degree Units). Different hybrids require a certain number of growing degree units in order for them to mature and maximize yield. We pick varieties based on yield potential and agronomics, but we also keep in mind the limitations of the average number of growing-degree days for Northern Illinois. When planting is pushed until later in the spring, it becomes uncertain if fuller season corn will have enough heat units in order to mature properly.

Soil conditions are equally important as air temperature, especially in the first 24-48 hours when the seed must soak up water to start the germination process. If the soil is too cold or if a cold rain occurs within that 24-48 hours, the seed can undergo chilling and die. Other concerns for cold, wet conditions are disease and uneven emergence. Most seed is treated with a fungicide, which has proven effective over the years. However, corn still requires approximately 100-120 heat units to emerge, usually during a four to five day period. This year, corn that was planted on April 22nd took almost 3 weeks to emerge. Some took longer depending on soil type and conditions.



Corn growing degree-days at **DeKalb**. From 04/22/2017 through 6/15/2017.

Actual total GDUs: **745**

Can you determine the growth stage based on the growing degree days accumulated to date? Use the [link](https://zalongo.com/babson/home) to find the answer!

Check It Out: The Babson Family Website

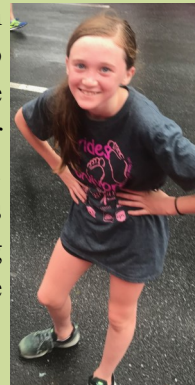
<https://zalongo.com/babson/home>

Family Spotlight

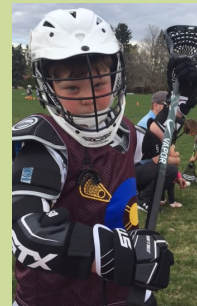


Sarah got 1st place for the lower school Lovett 5k; congratulations! She is staying busy this summer with swim team and competitive cheer and gymnastics.

Mary Elizabeth ran the Susan G Komen race with Dave. Congrats to her on making the Principal's List for all grades over 90%. She is busy this summer with acting camp and creative writing camp.



Henry is enjoying riding his bike, playing lacrosse and swimming.



Wheelocks fun in the sun!



Questions?

Meredith

(303) 243-3300

Meredith@BabsonFarms.com

Eric

(815) 756-2431

Eshearer@BabsonFarms.com