

The Lincoln Letter

Publisher-North American Lincoln Red Association

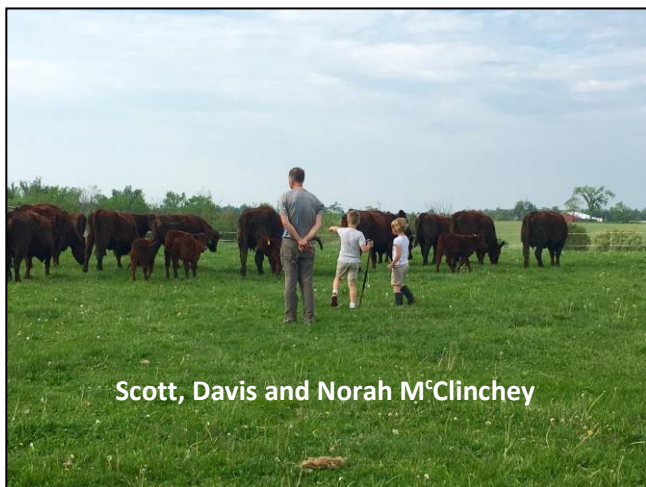
SUMMER 2016

Presidents Report

The spring started off very well with 15 calves, mostly heifers, born in April. In early May, a farming accident resulted in me having surgery to repair many broken facial bones and compound fractures of my jaw. Support from family, friends, colleagues and neighbors was overwhelming and it is helping to see us through my recovery. The remaining cows were even kind enough to wait until I was home from the hospital to have their calves. I always enjoy walking through the herd at this time of year and is especially enjoyable when the family joins me to see how the calves are quickly growing.

Life is busy and hectic and quite often we try to do more than we can during peak farming seasons. Having said that, we need pause and take the time to work safely around the farm! There have been many enquiries from people interested in starting new Lincoln Red herds and I continue to encourage interested breeders to visit Lincoln Red herds to see what the breed has to offer.

Have a great summer,
Scott



Scott, Davis and Norah M^cClinchey



Congratulations!

Thank you to Kathryn for showing a crossbred, commercial Lincoln Red steer. She named him George and he came from a herd near Beaverlodge, AB. The North American Lincoln Red Association recognized Kathryn's hard work with a showman's gift which this year was a Lincoln Red duffle bag.



The Good, Bad, and Ugly Tour!
Circle H Farms Pasture Tour
August 10th at 10:00 am

Plan to attend our 3rd annual pasture walk. Topics will include - High Stock Density Grazing, Delayed Grazing, Water Infiltration and the Benefits of Ground Cover and much more! For More Information Contact Brian Harper at harper4@goinet.ca (204) 725-2515

Visit our website at www.lincolnred.org

The Lincoln Letter

Publisher-North American Lincoln Red Association

SUMMER 2016

Now You See It...

Bob Nusbaum, Professor Emeritus, Univ of Wisc Platteville
nusbaum@uwplatt.edu

I saw an intriguing 30 minute video in the mid 80's that impressed me so much that I showed it to my Beef Management class nearly every year during my 25 years at the University of Wisconsin-Platteville. The video was entitled something like "Planning for the Future" and it had nothing to do with beef production, yet, I thought it was a great teaching tool. It started with the commentator asking the viewers to look at a half dozen random playing cards. Each of the six was flashed on the screen for only a split-second in rapid succession. Less time than snapping your fingers! Six of hearts, 4 of clubs, Queen of spades, Jack of diamonds, 7 of hearts and 3 of spades. It was so fast there was just enough time to only recognize the digit and suit that identified the card. Then the commentator asked the viewers to look at them again, only this time they were each flashed on the screen just slightly longer. A third viewing of the cards was, again, just a tic slower.

The commentator then asked if there was anything unusual about the cards and then proceeded to show that two of the cards were mismarked. The Queen of spades actually had RED spades and the 7 of hearts actually had BLACK hearts. He explained that only about 5% of the people participating in that particular exercise recognized the unusual cards. The commentator was demonstrating the power of a **paradigm** and he continued to explain why 95% of us fall victim to it.

What is a paradigm? Most of us have heard someone use the term, but what does it really mean? A paradigm is "a distinct framework of concepts, results or thought patterns within which subsequent work is structured". The card exercise shows this quite well. The first split-second flash of the cards gave the viewer enough time to recognize the digit and suit of the card. The "thought pattern" in our brains then instantly associated red with hearts and diamonds and black with spades and clubs even if the brief exposure didn't allow the viewer to actually "see" the color. Therefore, nothing was seen as out of the ordinary. Even when viewing the cards for the second and third time at much slower paces, the "thought pattern" in 95% of the participants had already concluded the results were normal or acceptable and didn't really pay much attention to the final two viewings because

their "card color" paradigm had already kicked in. Only 5% noticed the differences.

Why did only a few recognize the different colored cards? If the cards had been shown very slowly, say at 2 seconds each, everyone would have seen the differences. Is it possible to train ourselves to be better observers or more complete analyzers? It is very difficult to recognize when and how paradigms are affecting us. Most of the time we have no idea how paradigms shape our thought process or affect our analysis while solving problems. They are a product of our culture. They are learned. We do things a certain way every day, every season, every year and have a particular routine for a specific task. We continually struggle with recognizing biases within our "framework of concepts or patterns". I think paradigms can be equated with blinders on a buggy horse. The ultimate negative of this condition is **paradigm paralysis** which is a refusal to see beyond the current model of thinking. This can be tremendously detrimental to a person, a family or a business.

As I mentioned, the video had nothing to do with beef production, but was very useful to introduce my class to paradigms and discuss these pitfalls that discourage "thinking outside the box". I have compiled a short list of paradigms that, I believe, are quite common in the beef industry. Here are a few examples:

Increasing production levels increases net profit- This is a big one. There is zero correlation between levels of production and net profit. A producer with 400 pound weaning weights can make as much net profit as one with 600 pound weaning weights. It all depends on expenses. Emphasis on traits that increase production are more popular than traits that reduce expenses. Maximizing outputs usually requires added inputs, but there is "no free lunch". Do you want more weaning weight? Do you want more growth rate and yearling weight in your yearling sale bulls? Want a higher pregnancy rate in your heifers? Feeding grain will increase all of these, but usually at the expense of surpassing an optimal threshold for profitability. Creep feed is an expensive, inefficient way to put weight on calves and it masks the maternal ability of the cow. Fatter calves sell for less per pound and usually gain poorly in the feedlot. Yearling bulls developed in a feedlot have lower semen quality and a tougher time surviving in a hot July breeding pasture. Make your heifers earn their way into the herd by getting pregnant after being developed without supplemental grain. "Never buy

Visit our website at www.lincolnred.org

The Lincoln Letter

Publisher-North American Lincoln Red Association

SUMMER 2016

from an environment that is better than yours” is solid advice. To keep clients happy, seedstock producers should raise their cattle in an environment that is at least as tough as their customers.

Big cows with big calves increase net profit- Nebraska research projected 2013 cow costs to be \$670 for feed, \$80 for medicine, fuel, maintenance, etc. and \$150 for labor and ownership costs. With a 90% calf crop weaned per cow exposed, the annual cost goes to over \$1000 per weaned calf which has about doubled over the past ten years. Big cows cost even more to maintain, are less efficient and leave the herd sooner than smaller cows. The added calf weaning weight does not offset the extra expenses incurred with these large matrons. Fertility, great udders, excellent feet, a good disposition and calving ease are traits that increase longevity in the cowherd, thereby, reducing expenses. Prematurely replacing cows with bred heifers is a huge cost. “Maternal” bulls are often discounted at sales because they don’t have the biggest rib eye scan or the heaviest yearling weight, but they are the ones that can inject money-saving traits into the cowherd. In most profitable operations, it’s the easy keeping, never-miss, hardworking cows that make the profit year after year. Big cows have only one advantage and that is more salvage value when they are culled.

Early calving increases net profit- Producers have been told that bigger calves at weaning would make them more money, so many backed up their calving to February and March vs. April and May so that calves weighed more at the traditional fall weaning time. Dr. Barry Dunn at South Dakota State University compared the economics of early vs. later calving and found no difference in net profit. The labor, added expenses, sickness and death loss associated with cold weather calving negated any weaning weight advantage of the surviving calves in the fall. Cold weather pregnancy and lactation combine the cow’s biggest nutritional demands with expensive supplemental feed which is a very costly proposition.

Feeding hay is a necessary evil- This is true but it doesn’t have to last for 6 months. I have heard producers say that feeding hay to cows in the winter is therapeutic for them; it makes them feel good! That may be true but it is also expensive. I know several producers that actually graze throughout a large portion of the winter, even in the snowy Midwest, on stockpiled hay fields and pastures. Grass in the field is just like hay in the barn, but it takes

discipline to plan and prepare for winter grazing. The baler has to be put away about the first of August. Most producers run out of grass around the middle of October because they either made too much hay, were overstocked with livestock or a combination of both.

Tillable fields have to be used for grain- Many times I’ve heard the comment “that ground is too good to run livestock on”. Numerous studies have documented the economic advantage of grazing livestock vs. cropping. Net profit per acre with grazing wins every time. Cropping is an expensive annual exercise, usually risky and generally a less sustainable agricultural endeavor than utilizing ruminants.

Your time is free- This is a very common paradigm. A friend of mine who owns a large, grass-based dairy once told me “if you are 50 years old and still driving the skid loader, you are doing something wrong”. He was, of course, inferring that many producers don’t spend enough time managing. Everyone has heard the axiom “time is money”. Most beef producers are part-timers so a priority should be put on traits that reduce labor. Calving ease is a big one. Bedding calving barns, pulling calves, warming cold calves, tubing calves, stripping udders and cleaning manure from calving barns are just a few examples of what many in this business consider “business as usual”. There are many tasks that could be reduced or even eliminated. Think how our labor inputs would change if we were charged \$1,000 for every hour we spent with our cows. Then, we might be forced to prioritize and select a completely different set of traits. Our mantra might become “What can I **not do today** for my cows to save money?” Cows might become more self-sufficient.

These are my “Top 6” Beef Industry Paradigms. You may agree or not, or perhaps you can add to my list. Expense is the biggest robber of net profit in the industry and paradigms are those pesky, personal “patterns” or “associations” that tend to bias independent thinking and analysis. If you want to overcome your paradigms, “think outside the box” and be part of the 5% that see the color differences, you have to overcome your biggest obstacle, and that just might be you!

Visit our website at www.lincolnred.org

The Lincoln Letter

Publisher-North American Lincoln Red Association

SUMMER 2016

NOTES ON ST FORT SQUIRE

Andrew Mylius, St Fort Farms



DOB : 01/08/2013

Herdbook Number: P42569 UK541849601286

Sire: Norton Beau P4183

Dam: St Fort Lady Thora L780 Herdbook No: P20214

St Fort Squire, bred by A Mylius & Partners was retained in the St Fort Herd as a stock bull in May 2015. It was because of his pedigree and his notable Lincoln Red characteristics that he was retained as a stock bull as well as being selected for semen collection by the RBST *Rare Breed Survival Trust* and endorsed by the Lincoln Red Cattle Society. His sire, **Norton Beau** was got by AI and bred by Charlie Butcher of the Norton Herd from a straw, by "**Cockerington Tyler**". **Cockerington Tyler** was the stock bull at St Fort back in the 1970's and was Supreme Champion at the Royal Show and the Royal Highland Show in 1977, 1978 & 1979. His son, **Norton Beau** was purchased by St Fort at Newark Bull sales and was a stock bull for several years. He was Champion Lincoln Red and Reserve Interbreed at the Perth Show in 2010. **St Fort Squire's** dam, **St Fort Lady Thora** was the daughter of **Brooks Thora 119th P18123**, who was purchased by St Fort for £3700 gns. **St Fort Squire**, at 13 months old had an impressive DLWG of 1.76, whilst his Signet EBV's show he is in the top 25% for Beef Value and in the top 10% for Maternal Production Value, including the top 8% for calving ease. Note, that *SIGNET* make no special calculations for original population or P registered animals. Therefore these EBV figures are for the breed as a whole and so it may be assumed that Squires EBV's stand up to scrutiny from any perspective.



Secretary's Notes:

- We are planning on placing an order for straws from St. Fort Squire for shipment to the U.S. and Canada. Please contact Sarah Pedelty if interested.
- I have had several people call looking for Lincoln Red heifers, which is wonderful! If you are serious about starting a herd, *now is the time* to visit farms and put deposits on females for fall pickup. Most breeders operate on a first come first serve basis.

Help us save money by receiving your newsletter electronically!

As an Association, we are always trying to minimize expenses. Printing and mailing the Lincoln Letter is one area we hope to reduce costs. May we send the Lincoln Letter to you electronically? If you received the Lincoln Letter by mail and would like to continue receiving it, please mail back the postcard that was included or email the Association Secretary at sarahpedelty@gmail.com.

Name _____

Address _____

Email _____



Photo Courtesy of Sarah Bowley, SVF Foundation

Visit our website at www.lincolnred.org

The Lincoln Letter

Publisher-North American Lincoln Red Association

SUMMER 2016

Rare Breeds, Inbreeding, and Breed Survival

D. P. Sponenberg

This article has been reprinted with permission from Dr. D. Phillip Sponenberg, DVM. He can be reached for questions at dpsponen@vt.edu

Managing rare breeds often boils down to the management of inbreeding. The same is true of the genetic management of individual herds. I used to be somewhat cavalier about inbreeding, thinking that selection for productivity could minimize the risk of inbreeding depression. With a few more years under my belt, I have more respect for inbreeding, inbreeding depression, and the potential risk that it poses to rare breeds. Inbreeding can be a positive and powerful tool in rare breed conservation and management, but it needs to be used wisely because it very definitely has a potentially negative downside!

Inbreeding is the mating of related animals. Exactly how to distinguish it from linebreeding is subjective, because they are both “inbreeding,” but are usually taken to mean different degrees of relationship. One useful distinction is to consider inbreeding to be the mating of first-degree relatives. “First degree” means parent to offspring, or full- or half-siblings to one another. More distant relationships pose less threat, and can be considered linebreeding instead of inbreeding.

The reason inbreeding needs to be taken seriously is “inbreeding depression,” which refers to diminished vitality in inbred animals. This occurs to different degrees in different populations, breeds, or herds, but usually includes reproductive characters (fertility and prolificacy), and also general health and environmental adaptation. The perplexing part of this is that some populations tolerate great degrees of inbreeding, while others do not. Unfortunately, predicting which is which before undertaking inbreeding is impossible. Some lines of rare breeds have been intensely inbred for several generations, but then suddenly hit a real wall of inbreeding depression where fertility and vitality reach levels that suddenly threaten the survival of the line.

Inbreeding within a breed usually occurs in one of a few different ways. In some breeds that are very separated into different bloodlines, inbreeding can occur within a bloodline, or multiple bloodlines, but from bloodline to bloodline unrelated animals are still available. Pineywoods cattle are an example, with many distinct

family lines. Each is relatively linebred, some are highly inbred, but each is completely unrelated to other lines of the breed.

Other breeds, usually through use of individual popular sires and their sons, end up with all animals of the breed inbred to the same individual animal. If memory serves correctly, Lusitano horses all have at least some relationship to a popular sire from the early 1900s. In this case, completely unrelated matings are no longer available to breeders, even though the actual inbreeding level is relatively low, occurred in the distant past, and may pose no real threat. Individual closed herds can experience the same thing by using one male for a single generation, because after that generation every animal within the herd is related to that same single male, even if other herds in the breed are not. Randall cattle are a good example of this, because Everett Randall used a single bull in the herd for several years, then replaced him with a son. That pattern was repeated over several generations, so now all Randall cattle are related.

These two situations (inbreeding across an entire breed versus inbreeding limited to single bloodlines) can have different significance to the breed. In the first instance there are still unrelated matings available for every animal of the breed. In the second situation there is no option for a completely unrelated mating, and if inbreeding depression occurs there is therefore no remedy. The important and tricky detail here is that when an inbred animal is mated to a completely unrelated mate, the offspring is not inbred at all. This means that inbreeding can disappear completely in one generation if a population’s structure is managed well to ensure that all animals are not related. The challenge in rare breeds is to manage the entire breed so that unrelated matings are indeed available, because this can take careful planning with thinking several generations into the future.

Managing inbreeding is always most difficult for small populations, because maintaining all of the genetic diversity that is needed for long-term management is tricky. Add to that, the fact that linebreeding certainly does have some advantages as a breeding strategy by assuring such things as predictability and uniformity, and it is important to not throw out the baby with the bathwater! A few practical ways for breeders and breeds to manage inbreeding can be noted. The main goal is to assure that inbreeding is optional, or, to put it another

Visit our website at www.lincolnred.org

The Lincoln Letter

Publisher-North American Lincoln Red Association

SUMMER 2016

way, to assure that every animal has a potential mate that is completely unrelated.

One strategy is to not necessarily avoid all inbreeding, but to try to limit it to levels that qualify as linebreeding rather than inbreeding. This can take careful consideration, because the goal is to assure that each animal in the herd has a mate that is no closer related than a cousin of some sort. As a practical issue this means that several male lines need to be kept going, and while they can be related it must be kept to a relatively low level. As males are retained for breeding, their pedigrees must be compared to other males to ensure that relationships are kept distant enough.

While inbreeding of first-degree relatives does have risks, it can still be used as a last resort to save rare bloodlines within a breed. This can be a very useful breeding tool to rescue rare lines. In general, a successful strategy is to not inbreed/linebreed for multiple generations in a row. So, follow close inbreeding by an outcross to another strain, or to a less-related animal. In that way the inbreeding level does not creep up higher and higher, but is taken down a notch every generation or so.

In order to structure breeds to maintain genetic distance between herds, one option is for different herds to be linebred in different directions. This means that each herd can be linebred to a different founding strain, or a different set of ancestors. In this situation the breed is assured of several completely unrelated choices for mates if need be, because animals from different herds are unrelated. One way to manage this strategy over the long term is to use an occasional outcross to the herd, but then to take those outcrossed animals and linebreed back to the original strain for a generation or two. In this way the power of the original strain is not lost, but neither is the risk of inbreeding depression very high.

An opposite situation, where all breeders carefully avoid inbreeding or linebreeding, also has a subtle threat in it. This is especially true of rare breeds that have few options for outside stock. If all breeders of a rare breed carefully search out unrelated males to bring in every two or three generations, the result over time is that they have eventually used up the source of unrelated males. When done across all herds of a breed, the final result is that all of the herds are at least somewhat related to one another. This is because the search for unrelated animals takes the breeder further and further afield, and if this is

multiplied over all the herds of the breed, pretty soon they are all dipping into the same pool in just about the same way. Depending on numbers in the breed, this can eventually result in all animals being related to one another at some level, and at that point every breeding will be inbred to some degree or another.

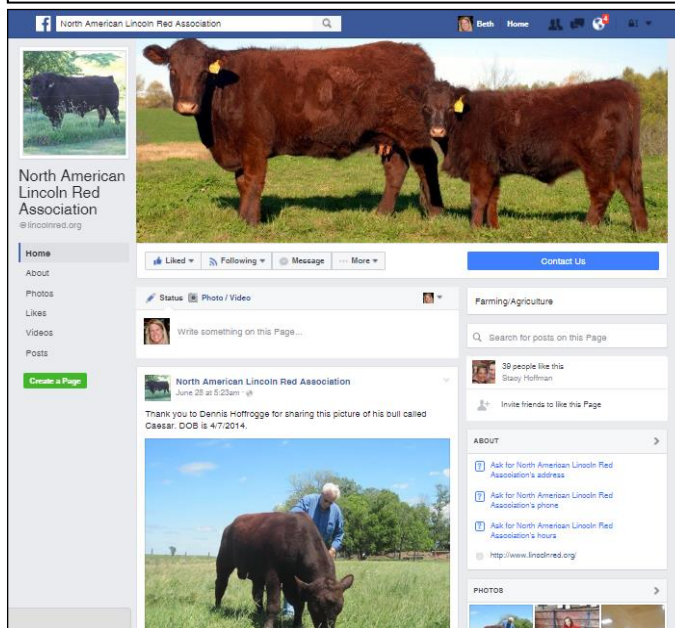
The most challenging situation for managing inbreeding is small herds, with single males used in the herd over several years. This situation is all too typical of several species like hogs and cattle. As new males are brought in, eventually the source of unrelated males dwindles, and eventually completely unrelated males may no longer be available. "Unrelated" in this case can take on a nearly tyrannical aspect, and very distant relationships may actually not count for much in inbreeding, but should still be noted for long-term management.

Managing inbreeding can be tricky, and usually takes good communication among breeders. Breed associations can be a big help in this regard, by keeping up with the different directions that the breeders are taking their herds and flocks.



**FIND US ON
FACEBOOK!**

Check out our new Facebook page. The latest news and animals for sale will be posted first on the North American Lincoln Red Association Facebook page. Also, if you have pictures to share of your Lincoln Reds or crossbred Lincolns please feel free to post them.



Visit our website at www.lincolnred.org

The Lincoln Letter

SEEING IS BELIEVING!

Take a look at Lincoln Reds at one of these farms:

- **Roger Angowski**
Pugwash, NS
- **John & Lorraine Ashby**
Stonehedge Farms
Prescott, ON
(613)925-5778
- **Sarah Band**
Mohil Farms
Puslinch, ON
(519) 824-5619
- **Sarah Bowley**
SVF Foundation
Newport, RI
(401) 846-8670
sarah@svffoundation.org
www.svffoundation.org
- **Andrew Ditmans**
Washington, KS
- **Lee Deutsche**
Crete, IL
farmspecialist@wildblue.net
- **Mead Ferguson**
Woodward, OK
- **Tom Fillmore**
Oxford, NS
- **Valentina & Richard Harness**
Stover, MO
- **Brian & Sonja Harper**
Brandon, Manitoba
(204) 725-2515
harper4@goinet.ca
www.shaverbeef.com
- **Dennis and Mary Hoffrogge**
Sleepy Eye, MN 56085
(507) 227-5745
dhoffrogge@gmail.com
www.dmhoffroggecattle.com
- **Jim & Doris Kotek**
West Salem, WI
- **Robert Latimer**
Nashville, TN
mccllc98@cs.com
(615) 838-4395
- **Scott & Heather McClinchey - President**
East Garafraxa, ON
scott.l.mcclinchey@sympatico.ca
(519) 928-3106
- **Sandy MacDougald**
Milrae Farms
Montague, PE
(902) 838-4395
- **Wallace & Patrick Milner**
Nappan, NS
patrickmilnercattle@hotmail.ca
(902) 667-8815
- **Dr Lincoln Montgomery**
Buckingham, VA
- **Larry and Sarah Pedelty**
(507) 421-7112
sarahpedelty@gmail.com
Straws for US Breeders
(Collected and Shipped from Hawkeye Breeders)
- **Alan Riley**
Strathclair, MB
- **Kevin Rivers**
Ingersoll, ON
- **Rose's Lincoln Reds**
Amherst, NS B4H 3Y1
(902) 667-9834
- **Sheldon & Wendy Schmaltz**
Worsley, AB
schmaltz_farms@outlook.com
(780) 685-3336
- **Monte VanderVorst**
Pollock, SD
mjvv@bektel.com
(701) 336-2621

Visit our website at www.lincolnred.org