Can AMSS Put Humpty Dumpty Back Together?

Farm Update:

The temperature have been higher than normal this last summer and into fall but fortunately not as high as last summer. Because we had so much rain in May and June the cows still had good pasture through part of September and I did not have to start feeding hay until then. Last year I was feeding hay by July 1st. Like everyone else our production costs have soared, not the 8-9% the government reports, but 30-60% for almost everything when compared to last year at this time. It is difficult to know where costs are headed but I suspect many cattle breeders are making tough decisions to cut costs at every corner including reducing their herds. On the plus side our cows are all doing fine and we have been able to produce more rare Heritage Shorthorn IVF embryos.

Quarterly Topic: Can AMSS Put Humpty Dumpty Back Together?

Changing The Rules:

Recently I was perusing the latest information from the American Milking Shorthorn Society (AMSS) and I almost fell off my chair when I saw that AMSS was changing their genetic expansion program and looking to work with a major cattle semen company to ferret out genes that are associated with classic Milking Shorthorns. Apparently AMSS has finally realized they really don't have Milking Shorthorns anymore. Instead, because they have consistently introduced other cattle breeds (primarily Illawarra and Red & White Holstein) into Milking Shorthorns, they have effectively produced crossbred cows that genetically may be less than 50% Milking Shorthorn. I applaud AMSS for belatedly recognizing they have a leviathan size problem.

History:

What is historically interesting is how there were so many great Milking Shorthorn cows in the early part of the twentieth century that were "tossed aside" in the quest for show animals that met the "standards" of show judges and their ilk. I am talking Milking Shorthorn cows that were producing 20,000 pounds or more of milk back then. Certainly the beef versus dairy debate within the Shorthorn breed at that time was also a factor in the loss of milking ability. Once Holsteins came on the scene in the 1940's and 1950's the demise of Milking Shorthorns was rapid because of low milk production. They have currently become the least desired dairy breed by dairy farmers.

Salvation Or Downfall:

Often breeds of livestock fall out of favor because they do not have the attributes sought by contemporary breeders and buyers. At that point most breed associations and breeders are looking for the quick fix and have an "aha" moment ie: crossbreeding. Rather than work toward improving the genetics of the breed through careful selection they reach for a "magic elixir" that might quickly be introduced that will "right the breed's genetic ship". What they forget about is that in the process they are undoubtably diluting the gene pool of the breed and losing other traits that made the breed desirable. That was certainly true with Milking Shorthorns when the herd book was opened up in the 1970's with Red & White Holsteins and Illawarras becoming the "fixes" of the day. In the process milk production was marginally increased (it was actually much better in the earlier 20th century) and in the process genetic defects were introduced from those two breeds of cattle. Furthermore many of Milking Shorthorn's best traits were not maintained because the focus of the breed became milk

volume and cross breeding. The conformation of Modern Milking Shorthorns (MMS) became more extreme (like Holsteins) and their dual purpose role in the cattle industry was eliminated. Anyone can look at a MMS today and see the drastic transformation that has occurred as cross breeding has become dominant within MMS and has resulted in massive changes to the breed's genotype and phenotype. Traits such as longevity, hardiness (especially important in grass fed production systems), fertility, thickness, and feed efficiency were all pushed to the back burner as judges, breeders, and MMS breed associations embraced the Holstein model. In the process MMS have lost their role/niche within the dairy industry to the point that no dairy farmer today even considers MMS when building or expanding their herd. Evidence for this can be seen simply by looking at MMS sire availability in the stud catalogs of the major dairy semen distributors around the world and see that semen listings for MMS are essentially nonexistent. If dairy farmers won't buy MMS semen then semen companies won't put MMS listings in their catalogs, furthering the downward spiral.

False Hope:

I am using the Humpty Dumpty scenario to exemplify the futility of what AMMS and other MMS breed associations around the world are trying to effectuate with their decision to breed back up to a true classic Milking Shorthorn through reducing crossbreeding and trying to isolate and incorporate specific genes that were present in the original population of Milking Shorthorns. If the "king's men" could not put Humpty Dumpty back together then likewise it is no more probable that the new found emphasis on putting Milking Shorthorns back together will ever be accomplished. There are two specific reasons why this will <u>never</u> happen. First is time. Even if it was feasible, by the time all the pieces are assembled society will have moved further in the direction of artificial milk substitutes with the desire to eliminate cows in general. Second, AMSS has permanently lost some of the genetic pieces that made up the original population of Milking Shorthorns through gene dilution and a counterfactual selection process ie: bad judges and Holstein wannabes. The reality is that the "bull" has left the barn.

Perhaps:

In once sense there is another alternative. The pure Northern Dairy Shorthorn population in the United Kingdom could certainly be brought to the USA through embryo importation and could be melded with many of the dairy type Heritage Shorthorn cows that still exist. Augmented by the large semen selection of dairy type Heritage Shorthorns that still exists from the 60's and 70's, which inculcate good milk production in their daughters, there is a basis for rapidly bringing back a contemporary Heritage Dairy/Milking Shorthorn that emulates the Dairy Shorthorns of the early 20th century. To further enhance milk production in pure Dairy/Milking Shorthorns there is still semen available from several excellent Heritage Dairy Shorthorn bulls from the UK in both the USA and Canada. I realize that the milk production from these cows will not match Holsteins but they could easily be part of solving a bigger puzzle-the continuing downward trend of the health, longevity, fertility, and structural soundness of the modern dairy cow. As has been said "pure breed genetics are the most valuable asset in the livestock industry". They can be used in innumerable ways and can provide important building blocks in any livestock endeavor. Tragically too many livestock/Shorthorn breeders are only focused on today and do not have any sense of history. That is why breed types are repeatedly being changed to rectify the latest self inflicted breed wound which often is related to the whims of show judges and breed associations.

Moving Forward:

For those unfamiliar with the Heritage Shorthorn Society (<u>www.heritageshorthorn.com</u>) it is a great resource for reliable historical information on all aspects of the Shorthorn breed. Many members of HSS are on a mission, to not just maintain old Shorthorn genetics, but to improve

and expand the quality and usefulness of dairy, beef, and dual purpose pure Shorthorn genetics in the modern cattle industry, For Dairy/Milking Shorthorns, this would include grass fed dairies, family cows, and locally sustainable production of dairy products. The movement toward A2/A2 milk and higher protein content in milk for the production of cheese and yogurt are additional areas that lend themselves to incorporating the genetics of Heritage Dairy/ Milking Shorthorns. The opportunities are expanding rapidly for Heritage Shorthorns as more and more cattle breeders recognize the importance of utilizing pure Shorthorn genetics and want to participate in rejuvenating the best qualities of the Heritage Shorthorn breed.

Future Topic: To Be Determined