A History Worth Repeating?

The history of poultry breeding has been written about in many books, articles, and web pages, even discussed in graduate theses. Most of these publications naturally have some relationship to or interest in poultry, however, I recently ran across an article written by Glenn Bugos which was published in the Harvard Business History Review about 15 years ago that looked at the chicken breeding industry from an intellectual property protection approach. Upon first reading, this treatment would seem to have more value to those involved in commercial poultry breeding – hybridization in both the broiler and layer industries, but an interesting point to me was that the author broke the article up in periods – dividing the story of chicken breeding into several phases. Some may argue that there are more periods than those listed in his article or perhaps the divisions were not quite as distinct as this author noted, but I am not as interested in reviewing the timetable for each division as I am the events that occurred along the way and how they have an effect on today's small flock poultry breeders and keepers.

According to the journal article, the first phase began with chickens coming to America and moved along to the creation of the table-egg industry. The discussion began by mentioning that chickens were brought to America by the Jamestown settlers and how originally they were not a particularly important part of their diet. Chickens were subsequently spread across settlements in the New World. Breeding was mostly random and only the toughest survived to reproduce. In fact there is more than a little evidence to suggest that for many early settlers, the main purpose to keep chickens was for sport – cockfighting. Along the way, the author discusses the beginning of fancy poultry breeding when exotic types of chickens were brought by merchant ships to the US. By the mid 1800's 'caged chickens' and selective breeding began to become popular among the 'gentlemen' – those with money - and the first poultry show was held in 1849 in Boston. Another book, “The History of Hen Fever” by Geo. Burnham does an excellent job of covering the 'Cochin craze' Although it was written very much 'tongue-in-cheek', much of that book seems to be based on verifiable events that took place during the mid- late 1800s.

When the demand for fancy chickens died down somewhat, many poultry fanciers turned their attention to breeding for utility, primarily egg production. By the 1880s American breeds like Rhode Island Red, Plymouth Rock and the Mediterranean import, White Leghorn, were either being developed or refined on farms across the US. The breeds in the American class, as well as their English-bred cousins, were developed as ‘dual-purpose’ breeds while the smaller breeds like Leghorn, Minorca, Hamburg etc were used for egg production.

At the turn of the century, with the advent of refrigerated storage, ice plants and chilled boxcars, eggs became a shippable commodity. Because of the wide
variations in egg quality and handling, a grading system was developed in the larger markets to insure the consumer of a uniform product.

From the supply side of the industry, farmers and breeders were advocating the use of pure breed chickens for uniformity. The American Poultry Association had formed in 1874 and published a Book of Standards for each recognized breed and variety. By the 1920’s pure breed flocks of commercially significant breeds such as Plymouth Rock, Rhode Island Red, Leghorn and others were supplying Americans with their eggs as well as farm families with meat from extra cockerels and spent hens. Other developments such as electric lighting, artificial incubation, trap-nesting, improved disease control, better nutrition and a better nation-wide transportation system were very important in developing the fledgling chicken and egg industry.

Reviewing any of the more than 350 poultry journals that came and went during the late 1800’s through the mid-1900’s one can find classified ads selling many different pure breeds of chickens - nearly all bred for production purposes as well as adherence to breed standards.

With the development of artificial incubation, businesses that specialized in hatching chicks and shipping to farms became commonplace in many towns. Some areas of the US had massive hatchery activity and became centers of the industry. In 1916 hatchery owners formed the International Baby Chick Association (IBCA) as a variation away from the American Poultry Association which was (and still is) advocating pure breeds of chickens with emphasis on type and color as well as production. The majority of hatchery operators cared less about how the chicken conformed to breed standards than how it performed as a layer. This is still true today as well.

In conjunction with University Agricultural Experiment stations and local newspapers the IBCA began sponsoring egg-laying contests - often with significant prize money and other awards. At this point, many hatcheries began offering crossbred chickens as well. Austra-Whites (Australorp X White Leghorn) Red-Rocks (Rhode Island Red X Plymouth Rock) and others were sold as terminal crosses. The crossing of pure breeds of chickens for hybrid vigor and improved production caused a rift between the purebred poultry men and those with more of a commercial interest in mind.

By the 1930’s, chickens were no longer a sideline business. The United States government stepped in by implementing the National Poultry Improvement Plan to regulate sanitation, disease control and quality assurance in the hatchery industry.

Along the same time the egg industry was ‘growing-up’ in America, the Broiler industry was getting started. Up until the 1920’s excess young cockerels and old layers were butchered and used by farm families for meat. Areas of the country, like the Delaware/ Maryland/ Virginia peninsula (DELMARVA), parts of Georgia, and areas in
the Northeast and Midwest began breeding, raising and selling chickens specifically for meat production, or ‘broilers’ as they were (and still are) called.

Broiler production quickly went from using purebred chickens to first generation cross breeds and then after the 1940’s the emphasis on multiple-mated hybridized male and female parent lines became the industry standard. This development was primarily to protect the genetics behind each broiler breeding company’s stock. With purebred or even single crossed broilers, anyone would have the ability to incorporate genetic advantages into their own flocks. Hybridization made this much more difficult if not impossible.

Much of the previously mentioned advancement in nutrition, sanitation, vaccination and meat transportation were a result of the increased emphasis on broiler production.

**Now to the ‘Meat’ of the Discussion**

In 1946, the Great Atlantic and Pacific Tea Company (A&P) sponsored a ‘Chicken of Tomorrow’ contest.

By this time, most of the broilers marked in the United States were New Hampshire, White Plymouth Rock, and Barred Plymouth Rock, some Delaware and Comish or first generation crosses of these breeds.

The concept behind the ‘Chicken of Tomorrow’ contest was to create a grass-roots breeding focus by poultry farmers across the nation for a broad-breasted broiler chicken. A wax model was developed and held up as the ideal broiler carcass. The contest started in 1946 and continued in 1947 with state and regional contests and finished with the national finals in 1948 with a national prize of $5,000. Chicken breeders from all over the country submitted their entries in these contests. These dressed chicken entrants were judged on a scorecard developed by the committee and winners were eligible for the national contest in 1948. Another scorecard was designed for the live chickens with special emphasis on economy of production.

The site for the National Chicken of Tomorrow contest was the University of Delaware’s poultry research substation at Georgetown, DE. Two cases of hatching eggs were shipped from regional and state winners from all over the nation to Bradley hatchery in Maryland. A total of 31,680 hatching eggs from 25 states were involved in this national contest. As the chicks were hatched each was identified by wing band and transported to the University research facility. Each group was placed in a separate pen where rate of growth, feathering, feed consumption and mortality was recorded for each breeder’s flock. All chicks were raised with the same feed and growing conditions. The feed ration consisted of a minimum 20% protein, 3.5% fat and 7% fiber. After a 12 week, 2 day grow-out period, the broilers were caught, weighed and processed. A random sample of every sixth bird from each flock was taken from the
The dressed bird scorecard was combined with the live bird scorecard to determine the winner.

The national winner of the first Chicken of Tomorrow contest was California (Red) Comish X New Hampshire cross entered by Vantress Hatchery of California.

Of course there are the subsequent fifty-plus years of history culminating in the broiler industry of today but that is a topic for another time. Hybridization and commercialization of both the egg and broiler industries left the dual purpose breeds of chickens in the hands of hobbyists, breeders and exhibitors and the few small mail-order hatcheries that are still operating. The Standard-bred dual purpose breeds, those known for efficient production of a reasonable quantity of eggs as well as providing a respectable carcass have somewhat languished in the past fifty or so years.

Yes, there are still plenty of good dual purpose chickens that perform well on small farms, but how many of these production-bred chickens meet the Standard description for type, color or weight? At one time, purebred flocks of Plymouth Rocks, Rhode Island Reds, Orpingtons, Wyandottes, Jersey Giants and many other breeds met the APA Standard Description, were shown in exhibitions and profitably produced eggs and meat. Selection for exhibition qualities at the hands of some fanciers has led many of the traditional dual purpose breeds to a point where they produce few eggs per year and in many cases wouldn’t make much of a meal if butchered. Mail-order hatcheries have selected generation after generation for egg production, keeping breeding flocks that loosely meet written standards in type and color and often are significantly undersized for the breed. These chickens may lay well and the cockerels may even provide a decent carcass when butchered, but each ‘breed’ shares a similar non-descript body type and would not be distinguishable except for feather color or comb differences.

I have said many times that there is no point to keeping different breeds of chickens unless each one is truly different. The first difference most people notice is color, but the first difference to look for is type or the shape of the bird. Each breed has a written description of how the overall shape of the bird should appear. A Rhode Island Red should be shaped differently than a Plymouth Rock, a Minorca should be shaped differently than a Leghorn etc. There are specific descriptions for each feather color or
color pattern as well as defects and disqualifications to avoid. Learning these differences and how to breed for them often takes years of experience and heavy culling.

Recently much emphasis has been placed on rare or endangered breeds of poultry. Last year it seemed like everyone was looking for Buckeyes. Black Javas were ‘hot’ three or four years ago and this past summer became much in demand again due to increased publicity. The supposedly extinct Lamona has been written about recently and much sought after by breeders and preservationists. I am constantly intrigued by the number of visitors at fairs or even at shows who have never seen a true Rhode Island Red. They are always amazed at how ‘dark’ they are and how big they are. These folks may have purchased ‘Rhode Island Reds’ from a feed store or hatchery and thought the faded, smallish Production Red is what the breed is supposed to be. The Barred Plymouth Rock is one of the most popular chickens sold by hatcheries today. At one time, Barred Rocks were massive, productive birds that were fiercely competitive in the show room and efficient on the farm. The chickens with blurry barring sold today as Barred Rocks don’t truly represent the breed. The few exhibition quality strains left are not particularly productive and mostly not available. I have been incorporating several strains into a breeding program to try to bring them back to the point they once were, but I still have a long way to go. Fortunately standard-bred strains of White Plymouth Rocks, Rhode Island Reds, Orpingtons, and several of the other dual purpose breeds seem to be a little more widespread and available – although many of these too need increased selection for productivity.

Preservation and recovery of historical breeds is an important effort. An increasing number of folks seem to be interested in working with rare and heirloom breeds and hopefully at least some of them will stay with it for the long term. But realistically, many of these ‘rare’ breeds are rare for a reason. They may have been important contributors to other more productive breeds or they may have significant historical value, but for some reason, they were replaced on America’s small farms by breeds like Rhode Island Red, Plymouth Rock, New Hampshire, Delaware and others.

There seems to be a resurgence of families trying to make a living or at least supplement their income on small farms across this country. They are choosing older varieties of vegetables and crops. Many are using older varieties of livestock and poultry. Consumers and chefs are willing to pay more for local products especially when value-added attributes such as taste, texture and quality are present. The American chicken breeds were developed for efficient and profitable family farm production. The fact that they originally met specific breed standards for type and color as well as productivity should be remembered. There needs to be a refocus on breeding production characteristics back into Standard-bred dual purpose chickens. Although amazing progress is being made with some of the heirloom chickens, there
needs to be some attention given to the meat and egg qualities of major breeds. At this point a good exhibition quality Standard-bred, farm-productive trio of Barred Plymouth Rocks would be worth a whole flock of Lamonas in my opinion.

If the ‘Chicken of Tomorrow’ contest contributed to the decline of productive Standard-bred chickens in American agriculture, then maybe a similar contest could assist in bringing back Standard-bred chickens that lay 250-300 eggs a year and provide broilers that will feed your family at a reasonable cost. The whole concept behind Chicken of Tomorrow was that genetic progress will be more rapid in a competitive environment. Private chicken breeders and small farmers led the way over 50 years ago when the emphasis was on bigger and faster, I believe promoting a new nationwide contest where small farmers and private breeders have the opportunity to recapture the productive qualities—both laying and meat—that made our Standard-bred chickens great for small farms is necessary now. Are we ready for the ‘Chicken of Yesterday’ contest?

MORE ON THIS PROPOSAL LATER...

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Historical information taken from:
