

# A Look Back at BIF History

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Any look back at BIF's 40 year history has to be about three things – People, Leadership, and Technology. It is really not about cattle – cattle don't have ideas and cattle don't have emotions. Cattle don't have need to make change...but people do.

Improvement of cattle and other livestock certainly predates Robert Bakewell (1725-1795) who first suggested that "Like begets like." At Bakewell's time, the mode of inheritance was unknown. Gregor Mendel did some fascinating work with peas and other vegetables in the monastery garden that proved that genes expressed themselves in a predictable and mathematical way, so discovered the principals of genetics in 1866, since known as Mendelian segregation. His work was rediscovered about 1900. Then in early to mid- twentieth century Sewell Wright and R.A. Fisher brought modern livestock breeding, from a statistical standpoint, into the area of science. Wright's principals of genetic relationships among relatives in one of the essential principals of our modern EPD (Expected Progeny Difference) calculations.

Long before we turned to science, the method of evaluating animals became the "eye of the master" visual appraisal along with a published pedigree, and it stayed that way into the latter third of the 20<sup>th</sup> century.

No idea is of much value until its time comes according to Victor Hugo. Certainly beef cattle performance testing fit the mold.

Before we get the "Cart before the horse," let's consider the genesis of scientific cattle breeding in the U.S. By 1900, livestock breeders of the mid-west had imported enough British stock to

become breeders and provide ranchers and stockmen with Shorthorn and later Hereford sires. Grading up from a Longhorn or Shorthorn base to Herefords was accomplished in a short 20 or so years. These earlier maturing kinds became popular, reducing the age to harvest and fit into a growing cattle finishing business which added value.

The Chicago International opened in 1900. Grands in the British breeds became smaller and fatter particularly from the 30's on. College judges were predominant, but were in tune with most industry desires. The rise of the influence of breed associations was monumental. The use of pedigree and the eyeball to secure adherence to breed type was the basis of successful breeding.

This system worked because value was attached to show ring standing and winnings, so change came slowly. Compact and compressed selection continued until dwarfism reared its ugly head in two types. University researchers got in the act and in concert with breed associations took a scientific approach to identify and eliminate carrier animals.

The gulf coast needed more. King Ranch in Texas developed the first American breed, Santa Gertrudis, with 5/8 Shorthorn and 3/8 Brahman blood in the 1920's. Beef breeding at the USDA Range Station at Miles City, Montana beginning in 1924 was to change the direction of the beef industry. In the 1936 Yearbook of Agriculture, Lush and Black called for objective measures of merit in beef cattle. Heritability estimates for growth by Knapp and Nordskog and weight adjustments by Koger and Knox stimulated research interests.

The first bull gain test was conducted in Texas in 1941. The Charolais breed was introduced into Texas from Mexico in 1936 but did not spread across North America until the 1960's. Some have called Charolais the "Babcock Test" of the beef industry because of the change this breed brought about.

The early research work at Miles City lead to developing a cattle production records program in Montana by 1936. Performance programs, as such in beef cattle, started before WWII but were not developed until much later in the period 1950-1980. A number of breeders such as the Bell Ranch, Wye Plantation, and John Rouse developed in-herd programs of record utilization. Between 1945 and 1950, state Extension beef improvement programs (BCI) were started noticeably in California, Colorado, New Mexico and Montana and were run by Extension specialists. Virginia organized the first state Beef Cattle Improvement Association in 1955 and many states followed suit. In the same year, with Extension help, cattlemen in Texas formed Performance Registry International (PRI). PRI became the focal point of the industry for performance. PRI's program was patterned after state programs except that records of weights were certified and a notable Certified Meat Sire Program was developed. State BCIA's were given director seats on the PRI board.

The Red Angus Association, formed in 1954, was the first to require performance data for registration. The other established breed associations were registering record members of cattle in the 1950's and '60's and showed only modest interest in jumping into the performance pool but many breeders were pushing for such.

The growing feedlots were getting disappointing performance from the British breeds and many even preferred the long-tailed "Okies". Several bull studs had started buying tested bulls from reputation performance herds. Jerry and Charlie Litton of Missouri were a force in the Charolais

Congress in Kansas City. They later promoted performance with the development and use of the LCR-Breeding Value Analysis program (developed by Richard Willham at Iowa State) used in the Litton herd.

By 1964, five breeds had announced or were contemplating announcements of breed association sponsored performance programs. The Extension Beef Improvement committee of the American Society of Animal Science, chaired by Curtis Mast of Virginia pursued the interest from three regional Extension conferences in beef performance testing. From this, Charlie Bell, U.S. Extension Animal Scientist, Curtis Mast, Everett Warwick (ARS) and Frank Baker (Bell's replacement) formulated a plan to achieve some standardization and coordination of beef performance programs. Baker put together a working group of twenty-five including extension, research, breed association and PRI personnel. The U.S. Beef Cattle Records Committee Report of 1965 was subtitled, "Recommended Procedures for Measurement of Traits of Economic Value in Beef Cattle." It was a landmark piece of work that was strong input to the later workings and guidelines of B.I.F.

There was great concern in many corners as to who or what would or should happen to bring about progress in harnessing known technology in a system of beef cattle improvement and increased profitability. PRI was poised to take over the performance movement. State BCIA's were strong and self reliant. Breed associations were weak in terms of performance programs and were quite independent.

In rides Ferry Carpenter, an 80 year old lawyer and former overseer of U.S. public grazing lands. Carpenter was a Hereford breeder and staunch member and supporter of PRI as well as Colorado BCIA and the AHA TPR program. Carpenter conferred with Frank Baker and Charlie Bell about putting together an industry-

wide performance meeting in Denver at the National Western. The government men pledged support and invitations went out widely for the meeting which was held January 14, 1967. It was titled, "International Conference of Beef Cattle Performance Testing Associations." The meeting was well attended by those representing many state BCIA's, breed associations, and PRI. Several speakers representing USDA Research and Extension, beef breeds, dairy breeds, the American Society of Animal Science, feeders, and A.I. organizations made presentations basically in favor of getting together. Later, 27 state program representatives made reports along with four National breed associations. The younger and smaller state BCIA groups generally favored a national program but the older, larger state groups were leery of a national of a national effort unless the National program suited them in view of their current success.

At the end of the day, no consensus was reached but a volunteer committee was formed to plan a move to a positive solution. The committee was comprised of Ferry Carpenter, L.A. Maddox, Bob Brandenburg, Stan Anderson, James Lingle, Lloyd Schmitt, Charles Coddling, Jesse Malone, Roy Beeby, M.K. Cook, Ray Woodward, Harry Herman, George Nimick, Matt Sutton, John Airy, Bob deBaca, and John Sullivan.

The committee met later the same day under the chair of Frank Baker. At this meeting it was voted unanimously that it was necessary:

1. To correlate the present performance testing organizations and agencies into a national organization, and
2. Such a national organization should have such functional powers as the members cared to give it.

During the next year the ad hoc committee became the focal point. The fight was whether the national organization should:

1. Be a council of member organizations with limited operational powers, or
2. A direct membership organization with strong operational authority. Ferry Carpenter favored the latter.

In the course of deliberations Sally Forbes of Wyoming wrote and circulated a most insightful letter in support of the council or federation type structure which would allow organizations to operate independently under a loose set of guidelines. The name Beef Improvement Federation was finally approved along with a revised set of by-laws.

On January 12, 1968, the B.I.F. organizational meeting was held in Denver with Frank Baker presiding until a president was elected. Curtis Mast from Virginia gave the keynote address and 25 state BCIA's, nine national breed associations, NAAB, ANCA, PRI, and three A.I. studs became charter members. A very large crowd representing every segment and area of the beef industry was in attendance. The by-laws were accepted and directors were seated including Mack Patton, Bob Purdy, Dave Nichols, Lloyd Schmitt, Harold Thompson, John Sutton Jr., A.F. Flint, Henry Matthiessen, John H. Wison, Ray Meyer, Stanley Anderson, Harry Herman, Everett Warwick ex-officio and Dixon Hubbard ex-officio. Clarence Burch was elected president and Lloyd Schmidt vice president. Frank Baker accepted the job of executive director. The work of B.I.F. had its beginning with the annual meeting and research symposium in April 1969 in Kansas City.

Committee work began with the aim of producing the first printed guidelines. Since that time, guidelines have been revised as needed and reprinted regularly based on the work and recommendations coming out of committees and approved by the board of directors.

Cutting edge research has been presented at each annual meeting and research symposium. Many young researchers have “earned their spurs” by bringing new information and becoming active in B.I.F. The synergism between researchers, breeders and their associations through BIF has been truly amazing.

B.I.F. annual meetings and research symposia have deservedly earned the reputation of being the best meeting on the annual national beef industry calendar in the eyes of many involved leaders. Printed proceedings have become reference items with lingering benefits.

A real work horse and visionary leader during the first half of the life of B.I.F. was Richard Willham of Iowa State. He lead in the development of the B.I.F. sponsored computer cow game which was used widely to teach the principles of record- based selection. Willham also had a strong hand in developing Estimated Breeding Values (EBV's) which were the forerunner to EPD's. He worked closely with the breed associations. He later lead the Sire Evaluation committee in the development of EPD's along with Larry Cundiff, Charles Henderson, John Pollak, Richard Quaas and others.

A number of sticky problems came along and were dealt with such as:

- Deciding to express EPD accuracy in terms of a percentile rather than possible change

- Deciding to formulate a frame score chart based on hip height.
- Deciding not to take over Ideal Beef Memo and print a B.I.F. paper
- Deciding to recommend procedures for the use of ultrasound for the evaluation of carcass traits, including the regimen for training technicians.
- Deciding not to recommend procedures for grading based on visual appraisal.
- Trying unsuccessfully to preserve and strengthen state BCIA's

Breed associations that may have been “foot draggers” early on have stepped up, have innovated, have educated their memberships, and have become the users of vast amounts of data which they own. B.I.F. has come of age, and with little power except the power of persuasion and with little money has lead a giant industry to greater productivity and profitability. BIF, in truth, has done very little but member organizations through BIF have accomplished much.

Is the work all done? Surely not! Population genetics has been the name of the game and will probably continue to be. The basis of EPD's is the individual record as a deviation from the mean of a true contemporary group. Now that the bovine genome has been sequenced (at least in part), how will data used in selection programs look 10 or 20 years from now? Stay tuned and stay involved!

**Some of the stalwarts of the performance movement that I've known include:**

**Industry:**

Dale Lynch  
Roy Wallace  
Harry Herman

Forest Bassford  
Bob de Baca  
Keith Vandervelde

Willie Altenburg  
Jim Gibb

**Breeders:**

Farrington Carpenter  
 Waldo & Sally Forbes  
 Frankie Flint  
 Jerry & Charlie Litton  
 Martin Jorgenson  
 Dave Nichols  
 Jack Cooper  
 Les Hoden  
 James Lingle  
 Glenn Butts  
 Jess Kilgore  
 Carlton & Murray Corbin

George Chiga  
 Glenn Burrows  
 Burke Healey  
 Dale Davis  
 Gene Schroeder  
 Jim Leachman  
 Bill Borrer  
 Max Hammond  
 Clarence Burch  
 Ray Meyer  
 Buddy Cobb  
 Doug Bennett

Lou Chestnut  
 Henry & Mark Gardner  
 James & Paul Bennett  
 Steve Radakovich  
 Rob & Donnell Brown  
 Glenn Brinkman  
 Mrs. R.W. Jones  
 Garald Parks  
 Roy Beeby  
 Henry Matthiessen

**Researchers:**

Ray Woodward  
 Doyle Wilson  
 Larry Benyshek  
 Richard Quaas  
 John Pollak  
 Jim Brinks  
 Marvin Koger  
 Charles Henderson  
 Paul Miller

Everett Warwick  
 Richard Willham  
 Keith Gregory  
 Robert Koch  
 Larry Cundiff  
 Tom Marlowe  
 C.J. Brown  
 Charles Kincaid  
 Gordon Dickerson

Merlyn Nielson  
 David Notter  
 R.T. Clark  
 Richard Quesenberry  
 John Knox  
 Bradford Knapp  
 Jay Lush

**Extension Workers:**

Frank Baker  
 Charlie Bell  
 Paul Pattengale  
 Ruben Albaugh  
 Curtis Mast  
 Dixon Hubbard  
 M.K. Cook  
 A.L. (Ike) Eller, Jr.

Carroll Scoonover  
 O'Dell Daniels  
 Bill Wharton  
 Melvin Bradley  
 Harlan Ritchie  
 Dean Frischknecht  
 L.A. Maddox, Jr.  
 John Massey

Pete Patterson  
 Roger McCraw  
 Bobby J. Rankin  
 J.D. Mankin  
 Daryl Strohbehn  
 Twig Marsden  
 Jim Gosey

**Breed Associations:**

Art Linton  
 C.D. Swaffar  
 H.H. Dickerson  
 Richard Spader  
 John Crouch

Bill Durfey  
 Stanley Anderson  
 Don Vaniman  
 Orville Sweet  
 Fred Francis

Craig Ludwig  
 Mack Patton  
 Jim Gibb  
 C.K. Allen