

Impacts of Beef Cattle Shortcourses

Dr. Tim Olson

Department of Animal Sciences
University of Florida, Gainesville

The first Breeder's and Herdsmen's Short Course, the predecessor of the Beef Cattle Short Courses that have now been held for 50 years, was held on June 18th and 19th, 1951 at the University of Florida. As the title of this first short course implies, the emphasis was on the production of purebred cattle and the event was sponsored by the Florida Angus Breeders' Association. About 75 attended this first short course whose topics included fundamentals of feeding beef cattle by Dr. R. S. Glasscock of the UF Animal Husbandry Department, selection of breeding females by Joe Keefauver, an Angus breeder from Tennessee and selection of a herd bull by Rae Ferrell, an Angus breeder from Georgia. A local Gainesville veterinarian, Dr. Karl Owens discussed herd health issues including Bangs, Blackleg, Scours and Footrot. Marketing, in this case of purebred cattle was a topic of discussion at the first short course. We are still working on this issue as well.

The first discussion of genetics at this first short course shows how far we have come in the last 50 years. A speaker on the subject of breeding was emphasizing the use of pedigree information in making breeding decisions and emphasized a difference between strain selection (that was supposed to depend on sire lines) and families that depended on cows and followed the female lines back. By the 1976 SC the discussion was on the use of national sire evaluation, the genetic improvement program that we are using today.

There was an interesting discussion of ethical issues related to the showing of purebred cattle, comments related to not using knives to cut ties (I guess that we don't get show cattle fat enough to worry about this anymore) and more interestingly that it's not legitimate to give beer to an animal just before it goes into the showing. My thought

- probably not such a good idea for the showman either.

Mr. Joe Keefauver, an Angus breeder from Tennessee, spoke on breeding and commented that although the best cattle come from linebreeding, most people can't successfully do it and most cattle aren't good enough to be linebred without running the risk of bringing out bad characteristics. A lot of emphasis was placed on visual evaluation by the speakers, as might have been expected for the time, but Mr. Keefauver also added "You can't tell for sure by looking, production is the ultimate test." Mr. Keefauver was ahead of his time. Another speaker, however, made the comment that "You won't find a bull that is too short-legged." Unfortunately this statement was rather quickly shown to be false.

Many of the other statements of the speakers that were reported in the Florida Cattleman were true then and remain true today. We would probably agree with the comments of Dr. Glasscock that "You can't raise good cattle by starving them six months out of the year" and also that "Don't let your cattle get too thin before you feed. It's easier to keep your herd in reasonable condition than to bring herds back." He also discussed protein content of legume vs. grass hays and made the comment that "Minerals alone don't do the job even though they are needed."

Mr. Keefauver made the comment that Angus bulls were in demand and that there was a shortage of good bulls making it a good time to get into the Angus business. It seems that the same can be said for the situation 50 years later. It was of interest to me that a commercial purebred bull should bring three times the price of a 1000 pound steer, or about \$750.

A comment was made prior to this first short course that the success of the first short course would determine whether or not future short courses would be held. Apparently it was pretty successful as we have now been having them for 50 years.

The second Herdsmen's Short Course was held December 4, 5 and 6th, 1952 in Gainesville at the then new Livestock Pavilion and was jointly sponsored by the UF Department of Animal Husbandry, the Florida Angus and Hereford Associations and the Eastern Brahman Breeders Association. A total of 27 speakers were involved with the emphasis being again on purebred cattle production with the topics including grooming, showing, sales, and management practices. This year the attendance increased to about 150. This year's program was planned in part by Dr. Jim Hengtes. Sloan Baker was reported to have been involved in a panel on veterinary problems along with R.W. Kidder and Mac Peacock. Again there was an emphasis on the need to feed show animals, starting soon after birth and Dr. Cunha commented that "feeding is an art and not a science" and although nutritionists today might disagree with this statement, there probably still is some truth to it. Dr. Cunha added, "It takes years of experience and a wary eye to become a successful feeder of show cattle."

Dr. Marvin Koger gave two presentations, the first in which he emphasized reproduction making the comment that "poor nutrition was the principle cause of failure to reproduce". I found it interesting that he was quoted as saying that 80% is the maximum conception rate in an average herd and that 70% would be a good average. He strongly urged his audience to cull animals that did not reproduce satisfactorily because this factor may be handed down and cause continual breeding problems within the herd. This would be a message that he would repeat many times over the course of his long history of involvement with

the SC. In a second brief talk and demonstration on selecting replacement heifers, Dr. Koger stated that he felt that too much emphasis was placed on growth rate alone and urged that heifer selection also consider type and the reproductive record of the heifers' dams.

Edgar Hudgins of J.D. Hudgins spoke and emphasized the importance of a definite breeding program coupled with rigid culling of undesirable offspring. He commented that they evaluate three calf crops from a bull before deciding what kind of bull he will turn out to be. Mr. Louis Gilbreath who was the Manager of the Camp Ranch which is now the Payne's Prairie State Preserve, also was a speaker and made the interesting comment that "Florida has been a fertile field for the selling of inferior bulls by bull peddlers in the last few years." Mr. Gilbreath commented that what he looked for in a bull was "back, body, bone, and britches" and also mentioned the importance of prepotency (the siring of uniform sets of progeny) in bull selection. Of most interest to me was Mr. Gilbreath's very progressive comment that breeders evaluate the type of carcasses that their bulls were producing.

An Angus breeder, Myron Fuerst of New York state, made several interesting comments and was quoted as having said that "We must devote more time to providing commercial cattlemen with the kind of bulls they need ... it is a moral obligation that we must assume." Apparently he felt that too many purebred breeders were too interested in making money and winning shows and were not concerned with the production of bulls that would improve the quality of commercial cattle. He disagreed with comment of a previous year's speaker when he said that too much emphasis had been placed on short legs, adding that quality of bone should be given more emphasis and that animals should have wider muzzles.

Dave Canning commented that purebred

breeders depended too much on auctions and that they should promote and hold private sales of their own instead. He also commented that they should steer more of their bull calves thus being more selective regarding the bulls that are sold. This year was the first to mention that a barbecue was being served by the Block and Bridle Club which was after the Friday afternoon program. These barbeques became a fixture of the program for many years. I can remember standing in line with J. Wayne Reitz at a barbeque at one of the first short courses that I attended.

The third Herdsmen's Short Course was held April 8-10, 1954. Again, breed associations including the Angus, Brahman, Brangus, Hereford, Santa Gertrudis and Shorthorn were co-sponsors along with the University of Florida. Don Wakeman along with Jim Pace and others were listed as being University of Florida participants along with W.C. Burns of the Brooksville Station. Among the industry participants were Max Hammond, Louis Gilbreath, Gifford Rhodes and Horace Fulford.

In 1955, "upwards of 400 owners, herdsmen, managers and others interested in the state's cattle industry were on hand" for the fourth short course on April 14-16 and heard from some 64 speakers on topics that included finance, marketing, management, feeding practices and research results. Dr. J. Wayne Reitz gave the opening address.

Carlisle Rogers, President of the First National Bank in Leesburg and a cattleman himself, made some interesting comments on what he looks for in a loan application to buy cattle. These included a knowledge of forage production. P.E. Williams, a noted cattleman from Davenport, advised young cattlemen to have a good plan and to get enough money for a long enough time.

Dr. Alvin Warnick made his first appearance

at the SC and emphasized that adequate nutrition and feeding was necessary to obtain a satisfactory calf crop as Florida (50-60%) lagged behind the national average (80-90%). Dr. Koger followed him and emphasized that adequate records were necessary to be able to cull out those cows with poor reproductive rates. Marketing was also discussed as it has been many times since. Even then there was a concern for the marketing of fat cattle as there was still a market for them in Florida but at prices that were below those in other parts of the country.

There was the first mention of weed problems, poisonous and others, at this SC with discussion by Dr. Erdman West and E.O. Burt both of the University of Florida. Chemicals such as 2-4-D and 2-4-5-T were mentioned as effective brush and weed killers. Pastures were another topic mentioned in 1955 which has been a frequent topic since that time. Dr. E. M. Hodges and J.R. Henderson cautioned against over-grazing and under-fertilization as they were the cause of the death of many a good pasture. Payne Midyette, Jr. of Tallahassee was a part of a pasture panel discussion along with D.W. Griffin and R.A. Willis, Jr. Dr. Southwell from Tifton, Georgia was on a panel together with Mac Peacock, and Gilbert Tucker, then manager of A. Duda and Sons Ranch at Cocoa charged with discussing management practices that would increase income. They concluded that producing the type of animal that the buyer wanted and using better bulls were key factors.

Uses of new technology has always been an important item at the SC and in 1955 the new technology was AI. Dr. G.T. Easley, the ranch veterinarian for the Turner Ranch in Sulphur, Oklahoma spoke on the subject. Parasite control was discussed for perhaps the first time at this SC by L.E. Swanson of UF.

In 1956, Charolais and Charbray were added

to the list of the sponsoring breed organizations and the FCA was also listed. The more than 400 in attendance were welcomed by College of Agriculture Dean M.A. Brooker. In 1956 the Block and Bridle club served three barbeque meals throughout the course of the event. By way of entertainment, a cutting horse demonstration followed the Friday PM program. The Block and Bridle club also had an Alumni-Breeder banquet the Wednesday evening before the SC and the tickets were \$2.00.

There was a lot of emphasis on creep feeding. Bill McGregor, an Angus breeder from Maryland, emphasized the importance of creep-feeding show calves and Ralph Cellon of Alachua also remarked that he felt that creep feeding was profitable for his commercial calves. Drs. Marvin Koger and Jim Hengtes participated through a demonstration and discussion of dwarfism. Dr. Alvin Warnick's talk this year focused in on changes in the reproductive organs during the estrous cycles and gestation.

Both Dr. Koger and Max Hammond emphasized the importance of performance testing during their remarks to the SC in 1956. Jim Pace stated that "our best and cheapest winter feed is silage of good quality". G.A. Ferguson of the Norris Cattle Co. stated that "hegari is our best silage crop". Anyone know what hegari is? Dr. Herb Chapman also talked on the use of silage at this session. Dr. Sloan Baker discussed rations for fattening slaughter cattle in Gadsden, Jackson and Leon counties commenting on the opportunity to replace some of the corn in the ration with "citrus molasses". Dr. Kirk from Ona discussed feeding programs for Central Florida as did Dr Dan Beardsley who is quoted as saying "Because of the fluctuation in the price of feeder and slaughter steers, it is difficult, if not impossible, to devise a feeding program which will return a profit every year... It would appear that the common sense approach... is to devise a system flexible enough

to take advantage of whatever opportunities arise for making a profit." It is still true today. I found it interesting that Dr. Zane Palmer discussed "what makes meat tender?" and commented that beef would have to be tender if it were to compete successfully with other meats. Finally, W.T. Stitt of Clewiston told the group how he attained a 90% calf crop in his herd emphasizing good management practices including good feeding, disease and internal parasite control, culling of less fertile cows as well as the feeding of minerals.

The announcement for the 1957 SC mentioned that it would be held at the Livestock Pavilion, **a couple of miles from Gainesville**. The program emphasized beef grading, perhaps this was the first short course to follow the practice of a particular theme. Drs. Koger and Warnick again had their usual places on the program. This year Dr. Koger discussed age at calving, warning that "it would be disastrous for most cattlemen to have their heifers calving at 24 months of age..." He felt at that time that a heifer needed to have reached 90% of their mature weight before breeding them. This was because Florida roughages simply did not have the strength to support both growth (of the heifer) and reproduction at the same time. Instead he recommended calving at about 27 to 30 months if this was possible. Dr. Warnick comments related to artificial insemination and felt that AI shouldn't be used unless both the bull and the cows alike are extremely gentle. Many of his comments on the disadvantages of AI still hold true today and included: 1) heat detection, 2) lack of trained labor, 3) lack of availability of truly outstanding bulls, and 4) breed association rules that discourage AI on any wide scale.

Other speakers included W.F. Sned of the Santa Fe River Ranch who commented that they castrated 20% of their bull calves and recommended creep feeding. Additional speakers

included Louis Gilbreath, Elliot Whitehurst, and Sidney Crochet of U.S. Sugar Brahman fame who reported that Brangus and Braford calves make good feeder steers and Tommy Mack of the Norris Cattle Company.

The Thursday and Friday evening programs ran until 10:00 PM during the 1958 SC. Max Hammond reported that the W. H. Stuart Ranch's testing program involved gain testing, progeny and confirmation evaluations and compared the returns from his top to bottom-producing bulls. Dr. J.L. Loosli of Cornell University spoke on the importance of adequate protein levels for calves postweaning. Dr. Loosli would later move to Gainesville and served as an acting UF administrator on several occasions. Dr. George K. Davis cautioned against feeding too high a level of copper. Dr. R.L. Reddish presented the results of a survey of customer preferences in buying meats.

In 1959 the emphasis was on pastures and fertilization. Dr. Koger discussed results of early crossbreeding research at the Beef Research Unit and these cattle were shown on a tour of the BRU on Saturday morning. Dr. Warnick this year commented on research related to the impact of a protein deficiency on reproduction. J.R. Henderson, the University Extension Agronomist explained the carrying capacities of various types of Florida ranges and the improvements in yield of beef per acre possible through fertilization and incorporation of legumes. A representative of Pfizer & Co. told those present about their research into the use of small amounts tranquillizers in feedlot rations, commenting that a faster rate of gain but not sedation was produced. The tranquilized steers had a 8.1% higher rate of gain, a 7.4% superior feed efficiency and graded slightly higher. Apparently this never caught on.

Wayman Chappell, the Southern Editor for

Doane Agricultural Digest spoke in 1960 on the cattle outlook, a frequent topic for most of the future short courses. A price drop was forecast and he warned those in attendance not to expect to make any money on cows sold after the summer and fall of 1961. Dr. Koger's talk this year, focused on the standardization of performance data for age of calf, age of dam, sex, etc. while Dr. Warnick had AI as his topic again. In fact, the whole Saturday program was devoted to AI and included speakers from several AI organizations as well as A.W. Dawson of A. Duda and Sons and Max Hammond. Saturday afternoon there were demonstrations of semen collection, semen evaluation, insemination procedures and procedures for the transportation and storage of semen. Ralph Sexton of Vero Beach, along with Russell Kiser of Lake Worth and Sanford Hartt of Avon Park each discussed "New ideas in our production program which are very valuable to use." Ralph is still interested in pursuing such new ideas. For the first time there was a horse session in a program presided over by Dr. Joe Crockett and a group of speakers that included Geech Partin, Raymon Tucker, and Fox Parker. Other topics covered included liver fluke and grass worm control and methods of wintering in various parts of the state.

The tenth SC in 1961 was the first with its main emphasis being crossbreeding. It was reported that over 675 people from many states and 13 foreign countries were registered. Dr. Cunha's comments indicate to me what a good politician he would have made for he is quoted as having said the following regarding data that might seem to show some breeds or crossbreeds as being much poorer than others: "I would like to emphasize that all breeds of beef cattle will have a place in future breeding programs in Florida. We hope everyone will have an open mind as they listen to the many reports being given at this short course and that they will not be quick to condemn a breed because a report may show a certain

weakness. These weaknesses can be overcome in almost all cases by proper selection programs. A weakness that is evident in a breed may not be apparent in crosses involving this breed.” He further commented that what all beef producers need to concentrate on is the production of an irresistible piece of beef for the consumer. Perhaps we have been too slow to work on this aspect of genetic improvement.

The hand of Dr. Koger on all aspects of this program is evident. His mentor at New Mexico State, Dr. J. H. Knox as well as his colleagues from throughout the country and close collaborators (Dick Kelley, Mac Peacock, Cal Burns, Max Hammond, Alto (Bud) Adams, Jr. and others) within the state compose most of the speakers. Dr. Koger’s talk was extensively covered in the Florida Cattleman Magazine. He commented that the breeding of beef cattle, as opposed to that of dairy, swine, and poultry is more complex and will likely remain more complex as beef cattle must be produced under pasture conditions where it is more difficult to remove nutritional and climatic stresses. In referring to Zebu-type cattle he mentioned both their desirable characteristics, such as heat tolerance and insect resistance as well as their tendency to have poorer reproductive rates than the “English” type cattle. Because of their adaptability and combining ability, however, Koger said that the Zebu will continue to play a leading role in beef production in the tropics. While we have seen a reduction in the influence of Zebu cattle in the U.S., throughout the tropics his statement continues to be true.

Dr. Koger’s comments continued with a mention of the native or Criollo cattle that descended from the Spanish cattle that populated most of the Americas. Today we call these cattle Cracker Cattle in Florida but they were more commonly called native or “scrub” cattle in 1961. Koger mentioned that these cattle have become

genetically adapted to the stressful conditions of the Florida environment through centuries of natural selection and that this genetic advantage has been underestimated. He felt that this “Criollo” influence could do much to help, through hybrid vigor, crossbreeding systems for Florida, especially in crosses with Zebu. This statement did not result in any major attempt to save the Cracker cattle although Dr. Koger might have made a more diligent effort to do so himself had he not been hampered by very severe health problems in the mid-sixties. We still have a few Cracker cattle left in Florida and in other parts of the Americas and programs exist to preserve the Criollo cattle indigenous to their areas.

Perhaps to avoid the wrath of some purebred breeders, however, Dr. Koger was quick to point out that in spite of the obvious improvements possible due to crossbreeding, “we should remember that there will continually be a demand for straightbred or purebred stock in operations where crossbreeding is not practical [very small herds] and, of course, as a source of bulls for crossbreeding.” In one of my own first talks at a SC where I discussed the possible use of crossbred bulls, I had to fall back on this latter comment to defend myself from an irate question from a purebred breeder.

In 1961 crossbreeding was not utilized to nearly the extent that it is today and so it was quite prophetic [and this is exactly the word that the FCA article used regarding Dr. Koger’s comment] when Dr. Koger stated that “It may well be that we are entering into a period when crossbreeding of beef cattle may be widespread throughout the United States as well as in the Gulf Coast region.” He had earlier commented that two major factors favored crossbreeding. These are that “experience of cattlemen coupled with experimental data show that there is no existing breed that will perform satisfactorily... under conditions on many commercial ranches in Florida” and that it isn’t

possible to utilize hybrid vigor without crossbreeding.

The biggest crowd in the history of the SC to date, over 600, attended the event in 1962. Cattle prices must have been high that year. Doyle Carlton, Jr., of Wauchula gave his advice to young men interested in the cattle business as a future. There was no mention of what he said in FCM. Ralph Sexton was again on the program and explained his selection procedures as keeping records, having a proper breeding season, having a good level of nutrition by using fertilization and proper pasture management and selecting and culling. Other longtime UF faculty on the program in 1962 were Don Wakeman, Jim Pace, Sloan Baker, Mac Peacock, Herb Chapman, Elver Hodges, Zane Palmer, and Bob Reddish. Dr. Warnick again stressed the nutrition/reproduction interface by reporting that the pregnancy rate as two-year-old heifers was only 16% on native grass, but was 92% on improved pastures. This was the first year that Commissioner of Agriculture, Doyle Conner, was reported as having been a speaker. Commissioner Conner had been made an honorary member of the Block and Bridle Club at its banquet that year. The SC ended with a tour of the Cellon Feedlot near Alachua.

The successful feeding of Florida's cattle was the theme of the twelfth BCSC in 1963. Dr. Cunha commented that we need more corn in order to feed out more slaughter cattle in Florida. Cushman "Cush" Rodebaugh, Sr., then of Orlando who was the President of American National Cattlemen's Association discussed beef marketing, importing, and exporting. Don Wakeman, Sloan Baker, Marvin Koger, Herb Chapman, Cal Burns, Jim Pace and Jim Hentges all discussed various aspects of steer fattening in Florida. The SC ended with a tour of the Whitehurst Feedlot near Williston.

In 1965 the BCSC was held in early May as it

has been since that time. Dr. Jan Bonsma of the University of Pretoria in South Africa was the featured speaker and nearly 800 people attended. The theme was "Factors Affecting the Calf Crop." Dr. E.J. Warwick, a beef cattle breeder from USDA Beltsville spoke on the subject of "Comparison of Reproductive Rates in Beef Cattle in Various Countries of the World." He commented that perhaps the biggest detriments to high fertility were unusually high environmental temperatures and uneven distribution of rainfall. He did say, however, that the breeds most commonly used in such areas seemed to have a great deal of adaptability, otherwise their calving percentages would be even worse. Dr. Warnick's comments this year indicated that even though Florida was, as a state, at the bottom of the ladder in beef cattle reproduction, this does not mean that we needed to stay there and that marked improvements had been made in the research herds of the University through improved management practices. Dr. Hentges and out of state speakers such as Dr. Jim Wiltbank then of USDA and Dr. L.S. Pope of Oklahoma State all discussed different aspects of minerals and nutrition on reproduction and Dr. W.C. McCormick of Tifton, Georgia told of the improvement in reproduction they had experienced through crossbreeding.

Dr. Bonsma's presentation emphasized that selection for specific visual characteristics in bulls and heifers along with culling based on reproduction will produce productive cattle. He also made a comment that I found interesting....a great deal of what any given breed may lack in its ability to adapt itself to climatic conditions may be made up by proper nutrition. This seems to be true with regard to using cattle with less and less Brahman influence here in Florida. Those that do so successfully seem to have the highest levels of nutrition. Dr. Koger was again on the program, discussing the impact of different pasture programs on reproduction. In a later presentation

he discussed culling stating that "Culling open heifers is the most important single control factor for improving the calf crop." He also commented that "Through culling we remove unthrifty animals as well as those poorly adapted to the area, and these two factors are of utmost importance." Several University and state veterinarians also were on the program including longtime state veterinarian Dr. C. L. Campbell as well as UF veterinary faculty, Dr. G.T. Edds and Dr. C.B. Plummer.

Dr. Bonsma demonstrated his ability to determine how many calves a cow had produced based on visual evaluation of 10 Angus cows at Stardust Ranch; of the 10 cows he was wrong on only one, and that by only 1 calf. Dr. E.J. Warwick concluded the conference with a number of predictions regarding the future of beef cattle breeding programs including that selection would be based on records and would be related directly to the performance of ancestry.....this is essentially what EPD selection is all about today.

Marketing was the theme of the 1966 SC. Dr. Ken Tefertiller, then the head of the Agricultural Economics Dept. chaired all three of the Friday sessions. Commissioner of Agriculture Doyle Conner kicked off the event with comments stressing the importance of sound beef cattle marketing programs and added the statement that "I am reassured by the doggedness and ingenuity of Florida cattlemen who whipped the odds many times over a 400-year history to arrive at the production peak that they are experiencing today." In other words he felt confident that marketing problems as well as all other problems faced by Florida cattlemen would be overcome and he pledged the help of the State Department of Agriculture in doing so. The impact of the Florida International Trade Council, Inc. on sales of Florida cattle and products to Latin America was discussed by Dr. Roberto Parajon and B. Edmund David. A number of speakers including O.T.

Edwards of Quincy, J.O. Pearce, Jr. of Okeechobee, R.D. Bennett of Greenwood and George Terry of Orlando then discussed feeding programs for stockering calves. A panel composed of Henry Chitty, Ralph Sexton, Gilbert Tucker, Dick Kelley and Bud Adams discussed their experiences with marketing their calves and added suggestions for improving marketing in Florida.

Pastures, fertilization and irrigation highlighted the 1967 SC. Dan Beardsley gave a talk on the present status of forage evaluation tests and their value to cattlemen commenting that poor forage quality is a real problem and that "Any program which would help the cattleman produce and utilize good forage efficiently should be considered." Dave Jones discussed forage production and utilization and Elver Hodges mentioned that the most vigorous clovers were Louisiana and Ladino white clovers. Dr. Warnick reported that the pregnancy rate of Brahman X Native lactating cows increased from 47% on straight grass pastures to 79% on clover-grass pastures. Dr. Al Kretschmer of the Ft. Pierce lab spoke on tropical legumes for Florida and moderated a panel discussion of the subject with Edsel Rowan (Ocala), Bud Adams, Pat Corrigan, and Lat Turner.

J.E. McCaleb of the Range Cattle Station, discussed the use of winter annuals on flatwoods pastures and stated that both oats or rye could be used successfully but cautioned that both required intensive fertilization and management and therefore might best be used in conjunction with pasture establishment or renovation as a means of getting some supplementary feed. Sloan Baker and Jim Hentges also spoke on winter pastures and forage quality, respectively. Dave Jones moderated a panel discussion on the use of temporary pastures with Mann Bailey (Oxford) and Kirby Hancock (Kissimmee). Bob Crane of Alachua was honored in 1967 by the Florida

Banker's Association as having the best production testing program in Florida. The 1967 program ended with discussions of native forages by L. L. Yalette, continuous vs. rotational grazing of cut-over pine forests by Ralph Hughes and the interaction of cattle and timber by E.R. Felton of Alico Land and Development Co.

In 1968 close to 700 persons were on hand for a program that had as its theme the nutrition and feeding of beef cattle. The program was dedicated to Dr. W.G. Kirk of Ona and R.W. Kidder of Belle Glade both of whom were retiring on June 30. The opening speaker was Stephen C. O'Connell, president of the University. Dr. O'Connell, who was reported to "raise cattle" told the cattlemen that he knew of no area of Florida agriculture where greater progress had been made than in beef cattle and attributed much of the progress to UF research. Dr. T.W. Perry, a professor from my alma mater, Purdue University, described corn silage as the real "ace in the hole" for cattle feeders and predicted that beef cattle feeding programs of the future will include more and more silage and that this will be the key to increased supplies of animal products that are being demanded by the American consumer. The feeding value of blackstrap molasses as a supplement for cows was discussed by Herb Chapman. Dr. Clarence Ammerman discussed the use of pelleted citrus pulp and later also talked on trace mineral supplementation. Dan Beardsley's talk examined the possibility of replacing corn with raw sugar, and Herb Chapman, Sloan Baker, and Joe Bertrand all discussed various topics related to beef cattle nutrition. Dr. Cunha spoke on the topic of Vitamin A supplementation.

Dr. Koger's talk was on feeding programs for bulls on performance test. Dr. Warnick was on the program as usual and emphasized that energy level was probably the most important single factor limiting reproduction in beef cattle. Bob Crane mentioned that his goal for his program was

weaning weights of 600 pounds and yearling weights of 1200. Dr. John Moore spoke on the factors influencing the nutritive value of forages and described high quality forage as one that is readily palatable, highly digestible and results in efficient animal performance.

"What kind of beef should we produce?" was the question that was raised at the eighteenth BCSC in 1969. The registration fee was \$5 per person. Over 900 were "on hand". Rhule B. Sleeth of Armour and Co. addressed the group on future trends in beef processing and merchandising but his prophetic abilities were a bit lacking in that he said that "In the future prepackaged retail meats will be frozen because it retains meat color... and preserves meat quality." John Pierce, director of USDA Livestock Division, was also a bit off as he predicted that electrical devices would probably be used in the future for grading. We are still waiting for that. Dr. Warnick again promoted AI as a means of genetic improvement of beef cattle and told the cattlemen in attendance that he was aware of a herd that increased its weaning weight from 518 to 605 pounds and the percentage grading choice from 50% to 97% over a four-year period through the use of AI. The experiences with use of AI were reported by Azel Lewis of A. Duda and Sons, Bob Crane, Jr. of Rock Hollow Farm, Max Hammond of W.H. Stuart Ranch, Herb Lloyd of Big B Ranch of Belle Glade and Mike Milicevic of U.S. Sugar. Max Hammond told the audience that "We can make AI work, but first let us be sure that the bulls used are genetically superior and not just highly promoted for sales purposes. Then, let us be sure that we have the feeding conditions that will permit the expression of the superior genetics." This is still very good advice in 2001.

Later speakers discussed programs to take weaned calves up to 600 to 800 pounds when they would go into the feedlot. Speakers included Jock

Sutherland of Immokalee, J.O. Pierce, Jr. of Okeechobee, Lat Turner of Sarasota, and R.D. Bennett of Greenwood. Sloan Baker, Jim Hengtes, and Joe Bertrand discussed the use of corn silage, grazing on summer annuals and other issues. The final major topic was calving at two- vs three years of age and Dr. Koger discussed the successful use of two-year old calving at the Beef Research Unit. Jock Sutherland, Jeanette Chitty, Ralph Sexton and Pat Corrigan all presented their experiences with two-year old calving.

Tender beef was an issue addressed in 1970 at the BCSC. R.B. Sleeth of Amour & Co. demonstrated the use of the Tenderometer I in determining tenderness. I am not sure what happened to this device. Dr. Cunha prognosticated about beef production in Florida in 1980. He predicted that Florida would increase its beef production by 84% by 1980 with the increase coming from a 30% increase in cattle numbers, a 5% increase in calf crop percentage, a 100 pound increase in average calf weaning weight and a 25% decrease in calf losses from birth to weaning. I'm not sure that we achieved his goal. Sid Crochet of U.S. Sugar talked about the progress they had made by utilizing new management techniques. Doyle Carlton, Jr., explained how they use fertilization and management to grow clover. Jim Hengtes discussed the problem of founder when full-feeding Brahman cattle, commenting that 3% salt in the diet and selection would likely help. Cal Burns discussed the importance of breeding cattle that are adapted to the local climatic and environmental conditions, commenting that the Montana Hereford cattle underwent a "shock" upon their arrival in Florida. Ranch management procedures was a topic addressed by a panel that included Gene Felton of La Belle, John Stitt of Clewiston, Alto (Bud) Adams, Jr., Ralph Cellon, Sr. of Alachua, and R.D. Bennett of Greenwood. The length of the breeding season was discussed by another panel that included Drs. Koger and Warnick, George

Francis of A. Duda and Sons and Dick Kelley of Monreve Ranch in Stuart. Dr. Koger stated that limiting the breeding season was one of the best tools for improving production.

Over 1000 persons including a large number from Central and South America attended the 1971 BCSC on crossbreeding. Dr. Koger was joined by H.H. Stonaker of Colorado State (but at the time in Colombia), E.J. Warwick of USDA, Tom Cartwright of Texas A & M, Richard Willham of Iowa State, J.W. Turner then of LSU, Joe Crockett, and Mac Peacock in discussing various aspects of crossbreeding. Joe Crockett pointed out that although F₁ cows show a great increase over purebreds their continuous use in commercial programs is limited as too many purebred cows are required to produce them. Jan Bonsma was again on the program and commented that "cattlemen could not place enough emphasis on selecting sleek coated animals with the ability to shed hair early in the spring." He later discussed the development of the Bonsmara composite breed.

The use of crossbred bulls was discussed by Dr. D.E. Franke (then of UF), Bud Adams, and Max Hammond. Don Franke commented on the loss expected when crossbred cows are bred to crossbred bulls of the same breed composition while Bud Adams commented that through selection they had developed Braford cattle that bred quite uniformly with weights of steer calves being increased to 600 pounds. Max Hammond, however, reported that the use of crossbred bulls on crossbred cows had not been satisfactory at the Stuart Ranch. He also said that while F₁ cows were very adaptable that the problem of their production made use of a crisscross system that allowed more heifer selection a superior option. Crossbreeding in Latin America was discussed by Drs. Dieter Plasse of Venezuela, Bernardo Bauer of Bolivia and Juan Salazar of Colombia.

A variety of topics were discussed at the 1972 BCSC. Sloan Baker discussed the pros and cons of feeding out cattle in Florida. Lat Turner commented on taxation of land used for cattle production and outlined major changes in the green belt law concerning which he had had a major role. E. J. Warwick was again on the program and discussed national sire evaluation programs for beef cattle. They had been used for dairy cattle and were showing tremendous results but efforts to develop the same systems for beef sires were just beginning. Don Wakeman described the ideal steer and Jim Pace looked at a comparison of the productivity of home-raised vs. purchased replacement heifers. Mike Milicevic explained how the production testing program at U.S. Sugar had helped the ranch produce more pounds of better quality beef more efficiently. Herd health was discussed by a panel composed of Max Hammond, R.D. Bennett, Ralph Cellon, Sr., John Stitt, Russ Kiser and Mike Milicevic

A record crowd estimated at over 1000 attended the 22nd BCSC in 1973. Topics discussed included preconditioning of calves (Derrill McAteer) and cattle diseases. Max Hammond was recognized as the Eastern Brahman Association's "Man of the Year." Joe Crockett spoke about his work with the Seminole Indian Tribe's Hereford cattle which resulted in an increase of 20% in calf weaning weight over a seven year period. A discussion of cattle feeding in the southeast included Gene Felton and Bell Greene of Alico Land and Development and Don Kaplan of Bartow. Dan Childs outlined the problems that he had as a western cattleman adapting to managing cattle in Florida. This was the first SC program to discuss Smut grass and its control. A survey indicated that 75% of improved pasture in central and south Florida was infested with Smut grass to some degree. Alvin Warnick discussed estrous synchronization and superovulation for the first time this year. Findlay Pate presented data on the use of pelleted sugar

cane tops for steers and the program ended with Clarence Ammerman's discussion of the use of citrus pulp.

Over 1000 were again in attendance in 1974. Beef grading standards was the major topic and Dr. Roger West discussed the problem of waste fat, suggesting that marbling requirements should be reduced and that increased feed costs will dictate that producers produce and feeders feed cattle which have gainability, gradeability and cutability. Pat Wilson as president of FCA was concerned about "governmental interference" and high land taxes in Osceola County. Beef grading was also discussed by Zane Palmer of UF, John Armstrong of the King Ranch and vice-chairman of the ANCA's grading committee. A new grade between choice and good was being recommended by the ANCA. While the packer representative on the program was reluctant to support this change, J.W. "Dr. Pete" Carpenter already had a name to suggest for it, "choicette!"

There was no mention of the number of folks attending the 24th BCSC in 1975 which emphasized finishing cattle on forage. Probably attendance was down as the executive vice president of the ANCA, C. W. McMillan, was quoted as saying "we've always had cycles in our business, but never before have so many adverse factors been combined with a peak cycle in a single year." These factors included increased cattle numbers, double-digit inflation, an ill-advised price control program and price freeze in 1973, a truck strike in 1974, government controls put in place by FDA and EPA as well as a world beef surplus. Production of cattle on forage was thought to be a means of dealing with the low cattle prices. Zane Palmer stated that forage-fed meat can be as good as grain-fed beef in quality and with less waste fat. Other issues addressed included saving on fertilizer costs by W. G. Blue, use of legumes to reduce nitrogen application by Dave Jones, sales of "baby beef" by "Dr. Pete"

Carpenter, futures of forages in the southeast by Dr. Glenn Burton of Tifton, haymaking using large bales by Jim Hengtes, and the results of the Brooksville Hereford genotype by environment (Florida-Montana) experiment by Cal Burns.

Marketing was the focus of the 25th BCSC in 1976 and with this I will end my review. The reason for this is that I arrived on the scene prior to the 1977 SC and therefore everything from 1977 to date cannot yet be historical! This was also the first year of the SC without Dr. Cunha. Gilbert Tucker was president of FCA and commented on the poor prices being received for beef cattle saying that prices must improve if profit is to be made. The results of the "Baby Beef" promotion efforts were given by Al Bellotto, chairman of the Florida Beef Council.

Dr. Ed Uvacek, a marketing specialist with the Texas Agricultural Extension Service gave the U.S. market outlook. He followed the up and down cycles of the cattle business over the years, saying that each cycle had taken about eight years. He said nothing seemed to point to a change now. I guess that has been proven true in the years since

then. Many of the same issues have been addressed since that time. We are still interested in market forecasts, properly designed crossbreeding programs that will produce cattle that will produce high quality meat, selection programs to improve productivity, weed control, fertilization, forage production, the use of AI and mechanisms to improve reproductive efficiency and improved animal health. We still have panel discussions and several will appear on this year's program. We still visit our research farms on occasion as we will this year. The cast of speakers has changed a little over the years but one thing has not changed, we still are fortunate to have Dr. Alvin Warnick as a speaker at this year's short course, continuing a tradition that began in 1955. Other early faculty members, now retired, with a long history of participation in the program that may be able to attend the 2001 SC include Dr. Jim Hengtes, Professor Don Wakeman, Dr. G.K. Davis, Dr. Clarence Ammerman, Dr. Herb Chapman, Dr. Zane Palmer, Dr. Dave Jones, and Dr. Joe Crockett.

NOTES: