

# Individual Animal Electronic Identification and Management

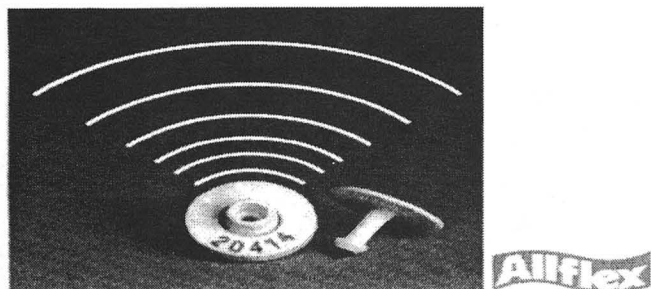
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There is an abundance of good technology available to the beef industry - from growth promotants to embryo transfer to packing plant robotics. But a new and exciting technology - Individual Animal Electronic Identification - promises to create opportunities for improvement that have never before been possible.

Throughout the production cycle, Electronic Identification provides the basis for automated data collection that will generate the information that will help producers improve everything from the genetics to the feeding and management of the cattle in their care. And, for this reason, **Electronic Identification will be a central technology** to the changes ahead for the Beef Industry.... changes that will move us *away from Group Production to Individual Production, away from Pen Data to Individual Data, away from Labor-intensive Operations to Automatic Operations, and away from Intuition as a Decision Making Tool to Information as the Decision Making Tool.*



**Figure 1.** The Allflex High Performance Electronic Eartag: "The Critical Link"

At the center of this process is the Allflex Electronic Identification Tag. This tag incorporates the advanced electronics of the **Texas Instruments TIRIS System** with decades of Allflex Livestock Identification and Management Expertise. The tag specifications are as shown in Figure 2. This combination of its light weight, flexibility and tolerance to a broad range of environmental parameters makes the Allflex Electronic Tag the perfect choice for all kinds of livestock applications. And, **the Allflex High Performance Electronic Tag is fully compliant with the recently estab-**

**lished ISO (International Standards Organization) standards** for Electronic Livestock Identification... this assures you that you'll be investing in the product that will be the *industry standard*, and not some limited application system that will go the way of 8-track tapes and Betamax video cassettes. With this innovative new product, Allflex provides innovative producers the *critical link* between the extensive computer hardware and software systems at their disposal and the individual animal data that will define profitability in the cattle business from this day forward. It is the link between a producer and his ability to manage information. Quite simply, it is the link between how things are done today and how they will be done in the future.

### Allflex High Performance Electronic Eartag Technical Specifications:

Diameter: 28mm  
Depth: 6.5mm  
Weight: 8.8 grams  
Temperature Range: -15 degrees to +150 degrees F  
Technology: Texas Inst. TIRIS 64 bit RF transponder  
Configuration: Available in Tamperproof (single use) or Reusable models.

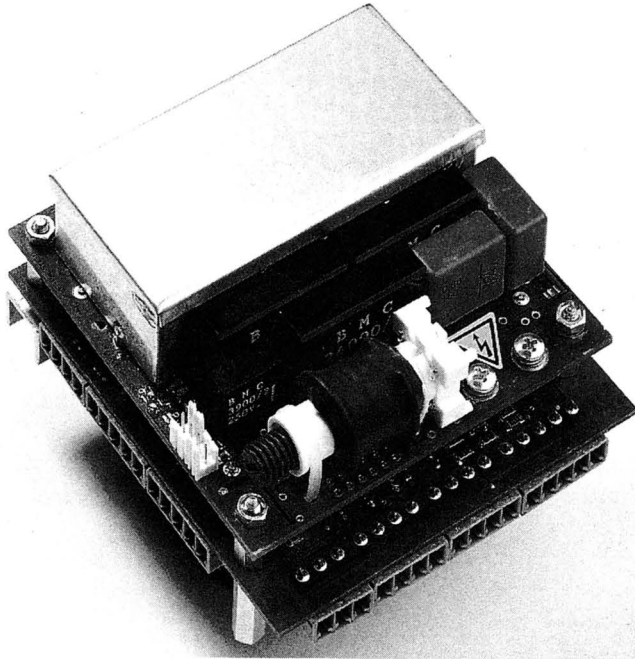
**Figure 2.** Allflex High Performance Electronic Eartag: Specifications

### Allflex Technologies

*Innovation in Electronic Livestock Identification*

Another key feature of the Allflex system is the diverse range of **Radio Frequency Reading Systems and Antennas** developed by the **Allflex Technologies** team. The Allflex system incorporates the advanced

Texas Instruments TIRIS S-2000 Reader System (as seen in Figure 3, following page), which provides RS232 or RS422/485 Data Interfaces, a variety of Input/Output functions, Easy Tuning to optimize the data signal (with optional Dynamic AutoTuning available), support for Multiple Antenna Configurations And, with FCC approval for all Allflex products, the S-2000 allows producers to focus on the livestock production job at hand, and not worry about things like stray voltage, antenna tuning and electronic interference.



**Figure 3.** The Texas Instruments TIRIS S-2000 Reading Module

LDDLAs important to the function of the system as the reader is the specific **Antenna Configuration** designed for your application. Allflex offers numerous options, including **hand-held** systems, **chute-side** systems, **panel antennas** for permanent and semi-permanent installations and the industry's only **Portal (walk-through) antenna** system. With selection dependent on your read-range needs and working environment, Allflex has an antenna system that will meet your needs.

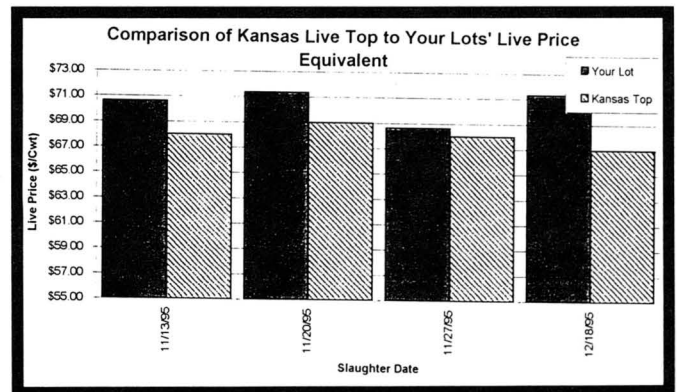
### **Drawing the Cattle Industry Segments Together**

With well over million cow-calf producers, and another 2,000 feeders (which control 85% of the cattle feeding), managing everything from genetic make-up to nutrition to herd health there's an abundance of "data" being generated across the country regarding cattle production. The problem is the fact that **we, as an industry, are "data-rich", but because we lack the mechanism to share and consolidate this data**

**between the marketing segments, we are truly "information-poor"**. From seedstock operators to the cow-calf man, backgrounder, feeder and on to the packer, there exists important information that could impact product quality and value, but no one has captured this data in one place... until now.

Through innovative organizations such as **Integrated Beef Technologies** (Englewood, Colorado: 303-770-1971), each segment of the industry can share in the information on each animal's genetic makeup, backgrounding program, feedlot performance and ultimate carcass value. By getting a better handle on the **total performance** of each animal, producers at each production segment can begin to sharpen their focus on genetic and management improvements. Through their Strategic Alliance program, Integrated Beef Technologies has provided this key information to producers, feeders and packers for tens of thousands of head of cattle.

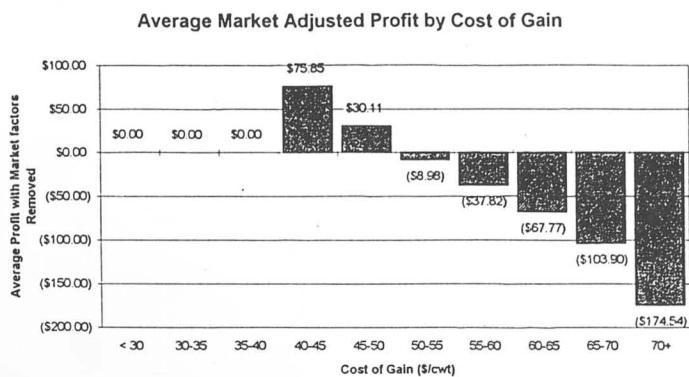
The comprehensive close-out data and report package compiled by groups like Integrated Beef Technologies are the first major step in taking this abundance of data and providing meaningful information on the **business of managing individual animals for maximum profit**. In Figure 4 (below), we see some of the important information generated on the actual performance of one producer's lot of cattle compared to the Kansas Live Top Price.



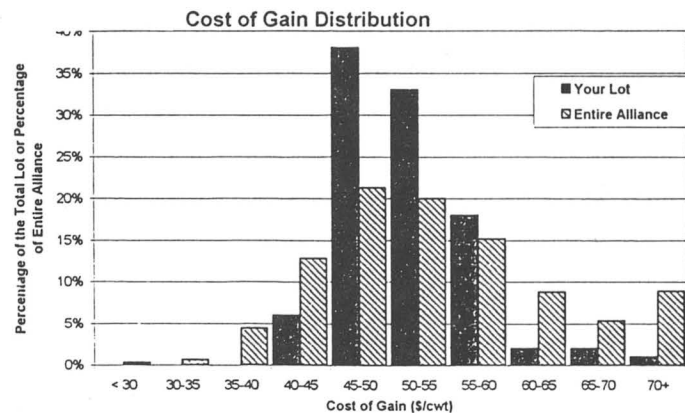
**Figure 4.** Int. Beef Technologies Close-out Report: Comparison of Kansas Live Top to Producer's Lot's Live Price.

As you can see in Figure 4, the results—an average per head advantage of \$37.18—speak for themselves. Although this *bottom line* consideration is very important, the ability to identify and analyze the factors that create this value is the real benefit of these data sharing systems. Again, referencing the Integrated Beef Technologies report package, you are provided the analysis of market adjusted profit by 20 key traits, such as those seen below in Figures 5 and 6. In addition to this

type of analysis, the report package provides analysis on over 50 correlations of Arrival Traits, Feedlot Traits and Carcass Traits.



**Figure 5.** Int. Beef Technologies Close-out Report: Avg. Market Adj. Profit by Cost of Gain. This group had an excellent cost of gain profile. Most importantly, very few head had an exceptionally high cost of gain. This type of performance would be indicative of cattle sorted for quality before shipment to the feedlot.



**Figure 6.** Int. Beef Technologies Close-out Report: Cost of Gain Distribution. This relationship is intuitively obvious, and is consistent within all Alliance cattle.

*The technology, the data, the information ... they are all based on the belief that a Learning System based on reliable data is essential to creating a more profitable beef production system, and that this system will give you a competitive edge in today's... and tomorrow's beef industry.*

## For Your Library

### A World Dictionary of Livestock Breeds: Types and Varieties, 4th Edition

I. L. Mason

This dictionary covers cattle, sheep, pigs, goats, horses, asses and buffalo. It includes all names which have been applied to interbreeding groups of these species whether they are called breeds, sub-breeds, types, varieties, strains or lines. The region or country of origin of each group is given and this is followed by a very brief description of the "breed" in terms of products, colour, and major morphological features. There is a note on the history of the breed and the dates of formation of breed societies and herdbooks. Synonyms for its name are listed as well as the present conservation status.

This new edition includes approximately 9000 entries, of which 5000 are main entries and 4000 are cross references. This represents an increase on the third edition of 18% for main entries and 13% for cross references. The highest proportion of new breed entries are in the horse and pig chapters. Furthermore some 2300 entries (30%) have been amended. These include 400 major

changes, such as new name, extinction, or the extension of a bare name to a complete entry. They also include 1900 entries with "minor" changes, for example new breed society, new synonyms, additions to distribution or description, changes in spelling or of conservation status.

China features strongly in all additions and amendments. In addition to these changes references to USSR, Yugoslavia and Czechoslovakia have been corrected in accordance with the current country names.

Overall the book continues to represent a standard reference work for all concerned with domestic livestock, particularly those involved in animal breeding and genetics.

CAB International, 198 Madison Ave., N.Y., N.Y. 10016  
 288 pages HB  
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