

Savannah Promotion and Development:
Adopting a Breeding Company Model
Brian Payne, Dr. Frank Pinkerton,
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The first two articles in this series (“The Savannah Goat in North America” and “The Savannah Goat in South Africa”) traces the history and development of the Savannah breed and identifies challenges for association development and breed promotion in North America. **These articles suggest that the preservation of the Savannah breed’s integrity is dependent upon the adoption of the South African Standard as well as an understanding by all Savannah breeders that this means a unique appearance.** In short, a Savannah goat should not look like a “white Boer goat”. Furthermore, **it has also been suggested that if Savannah enthusiasts fail to understand this, their selection practices could undermine the breed’s adaptability and survivability under extensive rangeland production.**

This final paper outlines the logic for a more controlled and measured approach to breed promotion and development than an “association model” normally allows. Instead of individual breeders making dozens of selection decisions in isolation, a more centralized “corporate model” is described. **Such an approach relies heavily on all breeders understanding the science and history of this “breeding company model”.** It is offered as a discussion paper so that we all can better evaluate its potential application to Savannah breed development and promotion.

Like the Boer goat, Savannah goats can undoubtedly contribute to North American meat goat production systems. However, instead of a breed that contributes significantly to the terminal sire side of a breeding system (superior carcass traits) Dr. Campbell seems to suggest that the Savannah goat will potentially fit better into a production environment that demands hardiness and surviv-

ability in combination with strong reproductive performance (maternal attributes).

Dr. Campbell's summary of the production merit of the Savannah goat and its importance as indigenous genetic material from South Africa is instructive. **If this breed is to have a future in North America, however, the challenge to Savannah enthusiasts will be threefold:**

- 1) **Define a role for the breed** within our domestic production environment,
- 2) **Test its ability** to perform under commercial conditions, and
- 3) **Quantify its potential** economic contribution.

To meet this challenge, Dr. Frank Pinkerton (The Goat Works), Brian and Katie Payne (Keri-Rose) and Elgin and Shirley Pape (3D Ranch) have initiated a program to evaluate the Savannah goat within the extensive range environment of the Texas Hill Country. Since this eco-system has been the hub of the American goat industry for decades it is critical to examine the commercial potential for Savannah genetics within this region. Carefully chosen co-operators will also evaluate the breed under more nutritionally optimal but parasite challenged pasture conditions in East Texas, Mississippi and the Carolinas.

In all locations record keeping will be standardized and **selection and production practices will be targeted towards optimizing production efficiency and lowering production costs.** In simple terms this means that the goat herd must produce the most pounds of saleable kids on the forage available with the least labor and additional costs (worming, supplements and housing). Economic efficiency is normally measured by net return and is simplified in the following equation:

**Net Return = Carrying capacity X Reproduction rate X
Survivability X Weaning weight X Price - Cost**

This philosophy has gradually evolved as the cattle industry has matured over the past century. Cattlemen learned through several waves of new “exotic” genetics that “bigger isn’t always better” and that **genetic potential for growth must be matched with the productivity of the environment.**” (Dr. Rick Machen, Meat Goat Production, Elements Essential for Long-Term Success).

Cattlemen also learned that if they were selling product by the pound and if they were going **to stay competitive with pork they could not ignore the importance of crossbreeding.** Beef researchers demonstrated a **16 to 35 percent increase in the productivity of crossbreeding systems over pure breeding systems** (Basarab, Alberta Agriculture, Crossbreeding in Alberta has come a Long Way) while in the lamb industry **“crossbred lambs increase litter weaning weight per ewe exposed by 17.8% (and) the corresponding value for crossbred ewes is 18%.”** (Leymaster, USDA-ARS, Fundamental Aspects of Crossbreeding of Sheep).

Due to its fundamental importance in generating net returns to a goat operation, **crossbreeding will be a critical component of Savannah breed promotion and development.**

Crossbreeding becomes one of the few available options when one considers that there are probably less than 100 full blood Savannah females scattered across North America. Some may argue that a “rarity value” could be attached to their small numbers and that the breed should be marketed as an “exotic”. Is this a viable option?

Having participated in the speculative days of unsustainable Boer prices I believe marketing Savannahs as expensive exotics would be problematic, largely because:

- 1) Boer prices were pushed upward by ratite (ostrich/emu) players baling out and by financial investors with a poor understanding of the real world of goat production and marketing. It is highly unlikely that, following the crash of both of the Boer and ratite speculative markets, a new “exotic goat” could be sold for higher dollars than existing Boer goat prices. It should also be pointed out that the Boer goat “fopped” in New Zealand, largely because the Boer followed an exotic wave of Zimbabwe Angora goats. New Zealand speculators were very cautious after watching Angora goat prices rise to unsustainable levels and then fall rapidly. Americans, not New Zealanders, purchased the initial Boer goats for big money while local investors and farmers reacted very conservatively to Landcorp’s Boer offerings. **Being “first” is the key to marketing an exotic goat at inflated prices.**
- 2) Even more sobering for those with high expectations from the sale of full blood Savannah seed stock, is the recognition that even **current Boer goat breeding stock prices will likely prove unsustainable** if commercial meat goat producers pay any mind to the economic realities of the slaughter market.
- 3) Inflated Boer goat prices were also achievable in part because the Boer goat’s productive and carcass merit was recognized by American academics and certain extension agents. This recognition is NOT yet the case with Savannah goats. **We do not have enough performance data to make any substantive claims concerning neither the production characteristics nor the economic merit of Savannah goats under either extensive (range) or semi-intensive (small scale pasture) conditions.**

If this rarity of Savannahs in North America leads individual breeders to place an inflated price tag on their full bloods, new purchasers would likely be encouraged to flush embryos from any

females that they purchase. If so, this could further complicate our long term Savannah marketing opportunities for several reasons:

- 1) **Greater numbers in more hands would reduce the “exclusive” nature of the existing breeder group and potentially reduce their marketing power. Embryo technology allows new entrants to become serious competitors very quickly.**
- 2) **Using embryo programs to increase numbers markedly increases production costs** and thus necessitates higher returns from seed stock sales. **This is the same “high input/high output” situation in which Boer breeders now find themselves; few have found this to be sufficiently profitable.** Most would agree I believe that embryo transplant programs would not be feasible at this stage of Savannah breed development. With no proven economic merit at the commercial level, Savannah goat owners would likely need to rely on the ego motivation of show ring ribbons or IRS “allowable expenses” to warrant continued interest and investment.
- 3) **The aggressive use of embryo programs has the potential to reduce genetic differences amongst the North American Savannah gene pool; thus, inbreeding could become a problem quite quickly. Also, greater homogeneity/genetic similarity, has the potential to slow down the rate of genetic progress within the breed.** This is because rate of response to selection (average breed progress) depends on the extent of genetic variation within the breed (differences between the worst and best) for any performance trait.
- 4) **Without some form of genetic evaluation program in place across the existing gene pool, embryo transplant programs could contribute undesirable production characteristics just as easily as positive production characteristics.** Thus, the key question must be: “On what base do you select the donor/sire for your embryo program?” If selection is to be based only on phenotypic appearance, with no evaluation of prior performance, you could be multiplying expen-

sive “star boarders” rather than efficient contributors to bottom line profits.

We Savannah breeders need to carefully consider our chosen pathway to breed development and eventual widespread breed recognition. Logistically, the genetic limitations inherent in a small gene pool dispersed over large distances in small herds is a serious impediment to breed development. Accordingly, relationships between breeders are of paramount importance. If less than a dozen enthusiasts can't find a way to agree on and implement a development plan, there will be a very limited future for the Savannah goat in North America.

As a “vertically challenged” person, I learned early in life that “small can be beautiful”. Fewer Savannah owners and fewer personalities should at some point translate into more efficient communication and promote faster breed progress. **Common agreement on a strategic plan is the crucial prerequisite to further our in-group goals.**

GOAL: Protect the value of our Savannah investment by restricting the distribution and sale of full blood females.

GOAL: Increase the value of our Savannah investment by co-operating in the establishment of a standardized performance evaluation process.

GOAL: Trade performance tested genetics freely within the group to enhance genetic diversity in each co-operating herd and facilitate the development of Estimated Progeny Difference (EPD) data or Estimated Breeding Value (EBV) information.

GOAL: Create “multiplier farms” to facilitate the evaluation of Savannah bucks in cross breeding

programs. Develop a hybrid female line specifically bred for the commercial meat goat rancher. This promotes buck sales but allows all full blood females to be retained in order to increase breeding herd size and increase selection pressure.

GOAL: Foster co-operation between Savannah breeders and commercial multiplication flocks in order to create the genetic uniformity and consistency of supply required to develop a branded meat product.

GOAL: Consider our “association” as a prerequisite step to a corporate entity. Adopt the “association” logo as a product label, adopt the name CAPRICO©: THE CAPRINE IMPROVEMENT COMPANY as our common corporate identity and and utilize the by-line, “Designer Genes for Quality Chevron”© to promote our meat products.

GOAL: Develop a relationship with a credible meat processor or distributor as a joint venture partner in the acquisition of capital and in market development by demonstrating the value-added industrial potential of chevon production.

GOAL: Develop uniform quality standards for goat carcasses and from this an incentive pay scale to reward producers in the CAPRICO© network. Create an overall marketing agreement (VAR – value-added re-sale) or production and supply contracts to support the CAPRICO© product line.

The best agri-business model for the production opportunity that Savannah owners share is the well documented growth of the Pig Improvement Company (PIC). **Six informed swine breeders**

started with an idea in the early 1960's and **within 20 years they were supplying breeding stock to over 30 countries worldwide. More importantly, they maintained control of their genetics! Their industry leadership was and is based on production efficiency and technical support. GENETICS WERE CONTROLLED THROUGH THE SALE OF SIRES AND CROSS-BRED FEMALES...NO PURE FEMALES WERE SOLD EXCEPT TO MULTIPLIERS WITHIN THEIR CLOSED SYSTEM!**

As a former executive for PIC, I was continually made aware of the 3 essential cornerstones of their business:

- 1) Adherence to the principles of genetic improvement
- 2) Herd Health programs
- 3) Customer Service

These three factors all contributed to company profitability and to improved profits for the participating commercial farmers. Improved breeding stock were continuously selected to maximize farm level performance traits of economic significance. Strict health protocols were put in place to insure that customers received only replacement animals capable of fully expressing their high genetic potential. Well trained field staff provided after-sales service to help customers realize the full impact of their investment in seed stock or terminal crosses for grow out.

Initial profitability now eludes many, if not, most new entrants into the commercial meat goat industry; as a result, further and rapid industry development is retarded. The basic nature of the industry (low cost, large scale, extensive production on Texas rangelands) remained unchanged until the advent (in the early nineties) of the higher cost, marginally profitable, small acreage producer elsewhere. The advent of the Boer goat popularized meat goat production and dispersed it across North America. The non-specialist

nature of the industry as a whole, however, did not change and this directly relates to the **relative lack of profitability across all sectors**. Meat goats, unlike pigs and poultry, “do not lend themselves to capital and labor intensive systems” (McGowan & Nurse) essentially because **market development has been non-existent. Meat goat producers are price-takers not price askers.**

The only way that this equation is likely to change is to “marry” a genetic opportunity with entrepreneurial vision, a business plan and the necessary capital to drive the system forward; that is, to expand Savannah numbers and their quality.

Even though the introduction of the Boer goat in the early nineties created substantial new interest in meat goat production; **inadequate supply across time and place (Degner, Pinkerton) has been the primary limitation to meat market development. This impediment has not been removed.** In fact, the declining numbers of Angora goats in the U.S. as well as the number of Texas goat ranchers retiring or changing to more profitable options (hunting leases and game farming) or giving up on meat goat production entirely because of excessive predator losses, has exacerbated the supply problem.

The widely dispersed and small scale nature of newer goat enterprises has meant that this emerging sector has not yet contributed significantly to the supply equation. The tendency of these operations to be motivated for “hobby” or “lifestyle” reasons rather than by “profit” or purely commercial interest has only reinforced the traditional industry structure of middlemen collecting, sorting and transporting goats, to the detriment of producers.

For almost 10 years the meat goat industry has mostly stood still. **“Variations exist in animal availability, size, condition and carcass characteristics. Lack of standardized processing techniques, inadequately developed product identification and a**

poorly organized distribution system (is) also apparent (Pinkerton, 1995).”

More significantly, the meat goat industry has not moved towards selling primal or retail cuts, **nor have entrepreneurs stepped forward with lines of value added goat meat products; the gourmet restaurant trade and emerging health market have largely been ignored. THIS NON-DEVELOPMENT WOULD SEEM TO SPELL “OPPORTUNITY”!**

A targeted approach to producing consistently high quality product based on consumer concerns and preferences and also on controlling slaughter conditions and processing variables is the basis to product “branding”(Pinkerton, 1995) ...CREATING A PRIVATE BRAND THAT BECOMES SYNONYMOUS WITH QUALITY ...UTILIZING A SUPPLY SYSTEM OF GENETICALLY SIMILAR MULTIPLICATION HERDS....PAYING PRODUCERS AN INCENTIVE FOR PRE-DETERMINED STANDARDS (Payne, 1993)are concepts that have the power to combat the inertia of “vested interest” and “affect beneficial, sustainable change (Pinkerton, 1995).”

Talking about concepts and describing problems is easy. Taking action, committing capital, time and energy and mobilizing support for one’s ideas is what leadership is all about. Adapting the PIC model, using it as an innovative Savannah breed development strategy and identifying joint venture partners is the Pinkerton/ Payne (Pancho/Quixote) partnership’s modus operandi. **Perhaps private initiative can in fact succeed in the absence of institutional, government or Association driven market development.**

Prior to my trip to South Africa in 1999 to procure the Savannah genetics, I made the following comments to Mr. Lubbe Cilliers (the founder of the Savannah breed):

“The gold rush mentality and unsustainably high Boer prices which marked the breed’s introduction to North America has **MASKED SOME SIGNIFICANT LIMITATIONS to this magnificent yet imperfect breed:**

- 1. Under hard (less than optimal/forage restricted) range conditions, the Boer is not as productive (saleable kid weight per doe) as America’s indigenous Spanish goats (Blackburn, 1995).**
- 2. Under extensive range conditions, the mothering ability of the Boer females will undoubtedly be questioned here just as they have in South Africa (Dohne Agricultural Development Institute, Adelaide, 1995).**
- 3. Functional deficiencies in Boer goats, such as jaw and hoof faults (Campbell, Boerbok Nus, 1994) are widespread throughout the North American gene pool.**
- 4. Once the euphoria over an exotic goat subsides (and the commercial economic reality of trying to make a living kicks in), more sober industry leaders could be **RIPE FOR THE INTRODUCTION OF SOMETHING BETTER! THIS WOULD SEEM ESPECIALLY APPEALING...TO THOSE RANCHERS WHO DIDN’T BUY INTO THE BOER GOAT STAMPEDE AND WHO MIGHT NOW BE READY TO UTILIZE THE ADAPTABILITY AND CROSSBREEDING POTENTIAL OF THE SAVANNAH GOATS.**”**

Mr. Elgin Pape’s interest in the Savannah breed and his willingness to try them in a range environment is encouraging. Observing the first bucks “get right to work” and after watching the vigour and conformation of the first range-born kids, his cautious endorsement that Savannahs seem adaptable and do not seem to have the Boer goats tendency towards excessive docility and laziness is **VERY ENCOURAGING!**

My personal bias is towards the development of a meat production and marketing system employing Savannah genetics rather than the outright sale of our initial genetics. “Designer Genes for Quality Chevron©” could be the concept which would enhance, rather than diminish, your investment in the Savannah breed. Careful selection of cooperating institutions and individual breeders could insure technical competency and a long term commitment to Savannah breed development. This program won't appeal to those of you that had only the “fast buck” in mind. If you are more attracted to a “slow nickel”, I would like to discuss our mutual opportunity. Clearly, opportunities may exist for the Savannah goat.

Can the PIC model be applied in part or whole to the Savannah breed in particular and meat goats in general? **Does anyone else have a better plan?** If you do, I would enjoy your perspective! If you don't, and want to learn more, I would encourage your participation in the East Texas Goat Raiser's Association Field Day to be held May 17, in Grapeland, Texas and, more specifically, in the informal Savannah owner social following the event and the Savannah meeting May 18.

Dr. Frank Pinkerton has again planned an interesting Field Day program with considerable focus on the Savannah potential. Be there or regret that you were not!

* “Designer Genes for Quality Chevron©” is a copyrighted program devised by the author and supported in theory by his technical advisors: Dr. Frank Pinkerton, Dr. Ken McMillin, Dr. Lou Nuti, Dr. Lynn Harwell, Dr. Cole Younger, Dr. Kim Logner-Younger, Mr. Elgin Pape, Mr. Chris Glynos, Randy and Nan Brock and Mr. Brad Simpson. CAPRICO©, the Caprine Improvement Company, will be the breeding corporation which will evolve from the application of the principles contained within this concept.

CAPRICO©: THE CAPRINE IMPROVEMENT COMPANY
CONCEPTS AND SCHEMATIC

CAPRICO

Continual Breed Improvement and Evaluation
Technical Support to Client Base
Targeted Market Development
Government and Academic Liaison
Legal/Accounting/Administrative Framework

PIC MODEL OR
GROUP BREEDING SCHEME (RICORDEAU)
DESIGNER GENES FOR QUALITY CHEVON©

100 selected does

COOPERATING FLOCKS	CAPRICO NUCLEUS	
5000 Commercial does	500 elite quality does	12 bucks
		100 does
60 replacement bucks		

Savannah bucks and F1 females for Sale to Commercial Herds

Meat Goat	Meat Goat	Meat Goat	Meat Goat	Meat Goat
Producer	Producer	Producer	Producer	Producer

CAPRI-DATA SERVICES

Record Keeping, Herd Performance Analysis, Cost of Production
SOURCE VERIFIED PASTURE TO PLATE ID SYSTEM

CONTINUOUS SUPPLY OF SIMILAR CARCASSES

BRANDED PRODUCT DEVELOPMENT

NEW GENERATION CO-OP OFFSHORE PRODUCTION

