

## **New Savannah Genes to America Frank Pinkerton and Brian Payne**

### **Preface**

In October 2010 we had the pleasure of being in Cummings, GA at the farm of Mr. Kenneth Mincey, owner of Mincey Marble Company and early importer of Boer goats. We were there to observe an embryo transplant program featuring recently imported Savannahs and to learn more of Kenneth's plans for producing and disseminating full blood seed stock as part of his larger goal to enhance and expand the breed in the U. S. The Goat Rancher has graciously agreed to publish our observations, and subsequent developments as the saga continues.



The Goat Man catching up on the Mincey history as a Boer breeder

## **Introduction**

The four bucks and 16 doelings, all about 11 months old, were first generation descendants of Savannah embryos imported from two South African breeders to Australia in 2007. This indirect method of getting South African-origin bloodlines into the U. S., via a 30 day quarantine in NYC, overcomes the present USDA embargo on direct importations of live Savannahs or embryos. Frozen semen from Savannahs can still be imported directly (from Australia) under certain circumstances.



The transplant program was under the direction of embryologist Peter Lynch of New Zealand, a 34-year veteran of such work with several animal species, worldwide. His technical virtuosity and broad knowledge of the goat world was impressive. His next assignment is a sheep project in Abu Dhabi.

Peter flushed eggs from 14 of the 16 doelings. Of the two that failed to produce, one was unaccountably pregnant, while the other had a mild uterine infection, perhaps from the vaginal sponge (CIDR) used to induce multiple ovulation. He implanted two and occasionally three, eggs in each of 62 Spanish recipients over a three-day period. Peter estimates that the conception rate will be about 70%. If so, the 43 pregnant does should drop at least 80 kids.



In November 2010, the 16 original donors will again be grouped and naturally mated to the bucks on their next estrus period. These matings will be specially chosen to take advantage of the different bloodlines represented in both bucks and does, and thus minimize unintended inbreeding. We expect that these same does will be flushed again in 2011. Frozen semen from the four bucks will be banked this year for Mincey farm use and for sale to qualified

breeders.(Peter Lynch hard at work with Kenneth keeping tabs)



## **Dissemination of full blood Savannah seed stock**

The twin goals of enhancing genetic diversity within the breed and expanding the use of Savannah goats within the industry will be pursued in two ways. *First*, males from the March 2011 kid crop will be offered to buyers via private treaty and possibly at public auction at the Mincey farm in early fall next year. Male kids will also be offered at a 'silent auction' at the conclusion of a Savannah Field Day expected to be held in late August 2011 at the Elgin Pape ranch near Harper, TX. No female kids will be offered for sale until 2012 to allow time for performance testing and selection.

*Secondly*, Mr. Mincey will provide male kids from the 2011 crop to Fort Valley State University(GA) and Kentucky State University to be used in specifically designed research projects and extension demonstrations. Much of the early focus will most likely be on systematic crossbreeding/backcrossing studies to better define performance and carcass characteristics including percent boneless yield as might be expected in commercial production systems.

Mr. Mincey will also produce Savannah/Spanish crosses on his farm for performance and carcass evaluation. It is expected that the carcass evaluation will be done by Dr. Ken McMillin, LSU meat scientist. This data will be compared to similar data from our earlier carcass evaluation projects with other breed combinations (See previous reports in *The Goat Rancher*)

As time and circumstances permit, Savannah sires will likely be placed at other institutions and commercial farms for performance evaluation in drier rangeland environments. This will facilitate comparative productivity of Savannah crossbreeds in various ecological zones and in both intensive and extensive production systems so that prospective buyers may better select from stock known to do well in their situation.

## **On-farm Performance Evaluation**

All Savannah and Savannah-cross animals at the Mincey farm will be enrolled in the on-going evaluation program conducted at Kentucky State University under the supervision of Dr. Ken Andries. All kids are expected to be weighed at birth and again at  $90 \pm 20$  days of age. The does will also be weighed at weaning time as a part of assessing doe productivity. The computer program developed by Dr. Andries will adjust kid weaning weight to reflect the impact of age of the dam, number and sex of litter mates, and type of rearing on weaning weight.

The program will provide the information necessary to rank does for productivity based on the number and weight of kids weaned as compared to the average for the group. For example, doe A might have a calculated performance value of 120% meaning that she was 20% above the group of does compared. Another doe might have a calculated value of 85% meaning that she ranked 15% below her group average. Does kidding at different times of the year (winter, spring, summer, fall) will be ranked within their respective seasonal group.

For goat owners providing Dr. Andries with doe weights at weaning time, the computer program will calculate a ratio of litter weight divided by doe weight. Those ratios can then again be ranked within the particular group. For example, if a doe weighed 110 lb and produced an adjusted litter weaning weight of 126 lbs, her weaning weight ratio would be 114.5 ( $126/110$ ). If another doe weighed 150 and produced an adjusted litter weaning weight of 126 lbs, her ratio would be 84.7 ( $126/150$ ). Obviously, doe A is the superior (more efficient) doe compared to doe B even though both produced litters weighing 126 lb.

The use of on-farm performance evaluation enables participants to make more rapid progress in genetic improvement of their herds than can be made by 'informal, unadjusted' barn records and by

using visual evaluations as major selection tools. The relationship between superior performance and good looks is nowhere near as close as many ring judges, some reputation-breeders, and numerous commercial producers would have you believe.

Mr. Mincey will probably look with favour on those buyers who are willing to systematically 'performance test' his animals. After all, he needs this kind of information from different production environments, in order to improve his own foundation stock over time.

He, Brian, and I concede that there may be considerable differences between the offspring from the various matings he has just made and will make in November and again in 2011. While we expect some degree of variation in the performance of various groups of his animals, neither he nor you nor will know for sure if performance testing is included in this endeavour. All else is speculation.

## **Conclusions**

As a longtime player and observer of the meat goat industry, Mr. Mincey came to believe that the Savannah breed could offer commercial producers certain *combination of traits not consistently* found in other breeds. Among those traits are: adaptability, hardiness, mothering ability, high reproductive efficiency, good rates of gain, and above average carcass conformation and yield.

At age 75, he choose to pay the price, literally, to import new genes to contribute to the existing U. S. Savanna gene pool in the hope that they would benefit the industry over time. He fully understands the absolute need to **prove**, to skeptical buyers, such benefits by *documenting the value* of this contribution via his own on-farm performance-testing program and that of cooperating institutions and selected farmers and ranchers. The value of these

contributions will be multiplied nationally as he and early ‘multipliers’ sell to producers elsewhere.

He is also aware that the current numbers of full blood and purebred Savannah are relatively small and feels that there will never be really large numbers of breeders of full blood Savannah goats, at least in the foreseeable future. Based on prior observations here and there, Kenneth expects that most Savannahs will and should be used in commercial crossbreeding enterprises. We, and others, concur in this assessment. We also feel strongly that there will be no ‘Savannah happening’ comparable to the ‘Boer happening’ of the mid-nineties. That also would be a blessing of no small import to the industry.



Kenneth and JoAnn Mincey have made an historic contribution to the development of the Savannah breed in North America.



