

THE AUSTRALIAN CORMO

"A New Scientific Sheep Breed"

Travis Jones

During the recorded history of mankind, one of the oldest endeavors of man in breeding and adjusting strains of livestock has dealt with sheep. This is verified by the existence of over 450 recognized breeds of sheep in the world today.

Never before in the history of mankind has genetic improvement been subject to intensive control as is provided today by modern genetics with objective measurements supported by data analysis on computers. Objective measurement involves the use of instruments and laboratory procedures to measure a character as opposed to subjective assessments of the same character made by visual judgement. Objective measurement in wool and lamb production narrows the risk margins in attaining economic gains in the shortest genetic interval.

A selection index can be designed to account for numerous characteristics other than visual faults. And for the dual purpose breeds, selection indexes should include not only fleece weights, but yield and micron tests. Unfortunately the economics of shipping, grading and scouring wool will play a more prominent role as we continue to experience the rising cost of energy and labor.

Twenty-five years ago a group of Australian sheep scientists was brought together to evaluate the economic status of one of Australia's larger sheep properties. A program was developed and put into practice. It was decided to use a one time crossing of Tasmanian stud Corriedale rams on 1200 selected Superfine Saxon Merino ewes. The new breed represents a sheep whose background is 1/4 Lincoln, 1/4 Australian Merino and 1/2 Superfine Saxon Merino.

In August 1961 the data banks were loaded and the computers started turning. From these efforts evolved a new breed of sheep based solely on measured production and economic characteristics - - - hardly an exotic, but a scientifically selected specimen of the traditional strain of sheep. This new breed, designated the Cormo, was initially developed by I.K. Downie as an economic improvement for his property. However the success of the cross brought national recognition as a new breed in only ten years.

Twenty-five years later, computer data continues to show genetic improvement in the breed that does not permit twin stud rams to remain in the herd more than two years. This allows genetically superior rams to enter the breeding flock as soon as possible. This selection index, which was developed by Dr. Helen Newton Turner, was one of the contributing factors which increased unassisted open range lambing by 25% in ten years. In June 1976, the United Nations Agriculture Organization struck a gold medal honoring Dr. Turner in recognition as the leading sheep geneticist in the world. Her research and projections in sheep genetics 30 years ago are now the basis of many modern research projects. Today the application of Dr. Turner's theories reveal strains of Merinos consistently producing quadruplets. See Note A.

In the Cormo parent herd, consisting of 15,000 head, all rams and ewes are run on year around grazing conditions to give each animal an opportunity to express its genetic make-up and economic soundness.

As a result of the program, in 1975, 7500 Cormo ewes averaged 11.25 pounds of grease wool which yielded 73.6% or 8.4 pounds of clean wool per head. Because of the uniformity of the clip, averaging 22 microns (low 64's) Toyobo Mills of Japan buys the entire clip unclassified and makes a fabric with a registered world wide trademark "Donicormo".

The breed selection index also includes a body weight gain directed at improving mutton characteristics and is supported by the inclusion of the Lincoln breed in the genetic make up. As of this date, over 10,000 Cormo rams have been indexed on production test records. Experiments at Shannon Vale Research Station in N.S.W. have shown the Cormo ewe to be an ideal prime lamb mother. As the breed is becoming accepted in Australia, it is estimated that there is a present population of over 600,000 Cormo-cross sheep. There are ten pure Cormo flocks in Tasmania, Victoria and Western Australia. These sheep are reported doing well in rainfall areas as well as arid regions which support less than 60 head per section (640 acres).

In the United States, the Cormo rams have been of great interest, particularly to the range operators. It would be modest to estimate that there will be over 15,000 head of Cormo-crossed sheep in the United States by May, 1985. As an example, a New Mexico sheepman has already bred over 200 Rambouillet ewes to two Cormo ram lambs by using controlled breeding methods. Similar breeding programs are going on in California, Oregon, South Dakota, Utah, Idaho, Montana, Colorado and Wyoming.

There have been three importations of Cormo sheep into the United States since 1976. The first consisted of 12 bred ewes and 2 rams. The second, 50 bred ewes and 5 rams in 1979, and third, 3 stud rams in 1984. The cost of importation is quickly becoming prohibitive as the third importation cost \$2800.00 per head on transportation and quarantine fees alone. Presently there are over 400 purebred Cormo sheep in the U.S. not counting the 1985 lamb crop.

CORMO WOOL: Cormo wool truly represents the modern trend of long staple, white high yielding fine wool. Cormo fleeces in the U.S. have yielded as high as 70% clean wool. It is rapidly becoming the hand spinners choice as it can be spun directly off the sheep. For the past two years Cormo fleeces have been supreme grand champion over all breeds at the nations largest wool show, the California National. Rams have been microned as fine as 17.00 microns.

MARKET LAMBS: The Cormo market lamb by U.S. standards is slower maturing and about 15% lighter. However, it probably has the highest muscle to bone ratio (high yielding carcass) of wool sheep in the U.S. with a rounded hind leg and wide loin area. The carcass is a lean, mild tasting, fine grained meat. The carcass traits are exceptional when crossed with existing U.S. wool sheep. The crossbred lambs are beginning to catch the eye of the lamb buyers and feeders.

EWES: The weight of a mature ewe runs from 140 to 165 pounds. Lambing percentages vary from 105% on open range unassisted conditions to 170% under assisted shed lambing operations. There is a high fertility strain within the imported sheep which has produced 4 sets of quadruplets and 1 set of quintuplets.

HERDING INSTINCT: Today the Saxon Merinos are recognized as the purest strain of Merino relating back to Spanish origin from which comes the close herding instincts valued by the range operator. The Saxon Merino breeders are noted for jealously guarding the purity of the original bloodlines. The Cormo breed's herding instinct is literally astounding and herding the sheep under driving or grazing conditions is performed with a minimum of labor.

During the early years of the Cormo breed development, several research studies independent of the Cormo project, were conducted to estimate the hybrid vigour of crossing English blood rams on Spanish ewes (Merinos). The trials have clearly shown that the English ram on the Merino ewe produces a better sheep than the Merino ram on the English ewe. McGuirk's (1967) study shows also that the Border Leicester ram on the Merino ewe was superior in lamb production to the reciprocal cross.

Iwan, Jefferies and Turner report that the Corriedale ram-Merino ewe cross was superior in performance to the reciprocal. They reserved judgement on the total superiority of the cross until wool data could be assessed. The Cormo fleece test data indicates a superior fleece highly desired by the textile industry. See Note B.

The probable key to the success of the Cormo was when I.K. Downie decided on using the Superfine Saxon Merino which has one of the highest developed fleeces in the industry. The Saxon fleece grades run as high as 100 spinning count. The breed selection index still includes fleece micron and yield tests on every ram used in the parent herd.

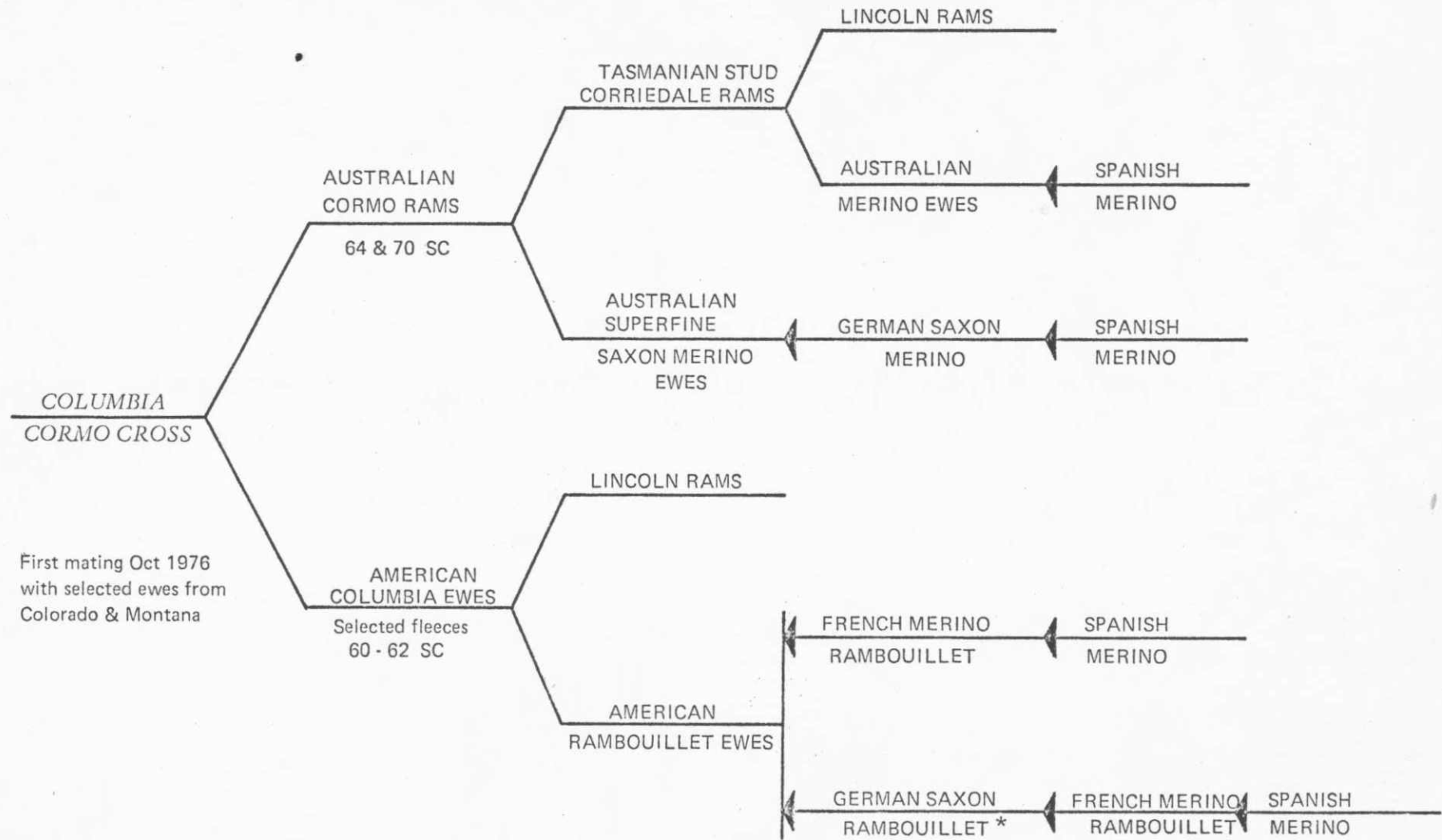
Tests in the United States using Cormo rams on Columbia and Rambouillet ewes show a remarkable hybrid vigour on lamb production with fast maturing lambs. The lamb's fleece evaluation was always improved if not equal to the parent ewe.

The Cormo to date presents a thrifty "easy keeper", which may well be able to produce profitable pounds of wool and lamb per acre. It should be noted the Cormo seems to perform better under pasture conditions than in confined areas.

Note A: The Cormo twinning selection procedure is unique in the fact that twins are selected after the ewe has had her lambs unassisted under open range conditions. This is accomplished by having watch stations in the lambing area used by the Nucleus (stud) ewes. The twins are marked at this time. All rams used in the breeding program are selected from the Nucleus herd.

Note B.: Cormo wool, having been bred on objective measurement, is now proving its superiority because 90% of the wool falls within one micron range.

POSSIBILITY OF GENETIC STABILITY ON FIRST CROSS WITH COLUMBIA & CORMO BREEDS



* Dickinson and Lush report in their GENETIC HISTORY OF RAMBOUILLET SHEEP IN AMERICA that by 1926 about 45% of the ancestral lines end in animals bred by Baron von Homeyer in Germany.