AUSTRALIAN RED BREED

With the red breeders now looking to show at IDW it is a good time to look at how the breed evolved in Australia, and why.

During the 1970s and early eighties some Illawarra breeders were becoming concerned at the lack of economic progress within the breed. I for one believed that the object of keeping dairy cows is to produce high-quality milk economically, as the primary objective, and not to worry about breeding to restricted bloodlines, almost on a line-breeding system, for show purposes. Early on, in the 1970s, I was advocating the use of Danish sires to lift performance. Apart from Harold Thompson, Jack Cole, and Henry Bath, few locally showed a similar interest. Eventually, in the late eighties, Bill Thompson, of Arajarra stud in Victoria, organised the importation of semen from both Denmark and Sweden, against the active opposition of all A.I. facilities except Wacol in Queensland, which proved co-operative, thanks largely to the efforts of John Harle. I thought the Illawarra society missed the boat completely when they looked to American red factor Friesians to lift the breed. Enhancer for example was the second calf of a five year old cow and would never have got past first base under European selection criteria.

The reason I stuck with Illawarra in the first place, and decided to work with them, was that they appeared to be far more tolerant of Queensland coastal conditions and maintained physical condition, production and milk quality at a more satisfactory level than other available breeds,. (I believe that if milk is regularly produced at less than 3.4% protein you are bilking the consumer). After all, Illawarras had evolved as a breed under Australian conditions!

To use Scandinavian semen was, in fact, going back to some of the original genetics of the breed I think. Before 1800, organised herd societies did not exist, except for Jerseys (1789), in the island. Coates herd book for shorthorns followed in 1822 The Illawarra was the derivative of a number of strains of cattle. These cattle were brought out by the early settlers. They certainly included Dairy Shorthorn and Ayrshire blood, and probably South Devon, with perhaps Sussex, and North Devon strains as well, judging from the dark red colouration of the typical traditional Illawarra. There used to be far less distinction between beef and milk breeds. For example, the first dairy cows I ever had any dealings with were North Devons! The red cow breeds throughout Scandinavia would have been taken to England by Viking invaders to provide common ancestry with the British Shorthorn, and therefore the Illawarra.. Certainly the Scandinavians had been upgraded during the nineteenth century by infusions of Scottish Ayrshire, and it made sense to me to try to revitalise the Illawarra breed with Scandinavian bloodlines.

Carrying things a step forward the fledgling Aus Red society also experimented with an Angler bull from Germany, and a Rouge Flamande from France. While the Angler had some success down south it was not successful here, in coastal Queensland. The Frenchman was not a success.

Before the 1930s the dairy industry in Europe regarded yields of 5,000 litres as excellent and 3,000 as satisfactory. The 1930s changed all that. When the Russians, in

1931, pioneered the extensive use of A.I. on their collective farms, the advantages of the system were so apparent that Scandinavian countries, starting with Denmark, rapidly adopted it. Coupled with meticulous, universal, herd recording, in all countries, such rapid progress was made that by 1947 Denmark was the world's leading dairy producer, largely with red cattle, with a national herd average of close to 7000 litres, in spite of the war. Today the Scandinavian countries average over 9,000 Lts per cow per year, with very little difference in production between the red breeds and the Friesian. Recently, in the Californian milk trials, when red bulls have been crossed with Friesian they have been finding not only an improvement in composition, but, in some cases, in quantity as well. They say that of course this is 'hybrid vigour', but the body weight/ production ratio of the Scandinavians is better in the first place and the better results with hybrids are just what I would expect. Currently, large quantities of Scandinavian Red semen is being bought up by American interests.

These new AI breeding systems were organised and run by the farmers' co-operatives and breed societies. No government involvement, originally, apart from the USSR Artificial Breeding rapidly covered the insemination of over 95% of the Scandinavian national herds. From the beginning a comprehensive number of economic factors were taken into account. Besides milk production, and basic compositional quality, growth rate, early maturity, calving ease, regularity of calving, temperament, teat placement, milking speed, general conformation, and somatic cell counts were considered. I think the last to be very important. In a healthy young cow 75% of somatic cells found in milk are not disease fighting white blood cells (Monash University research, circa 1989 to 1991). Most are sloughed tissue cells, so low counts attributed to bulls are more a reflection of tissue strength and therefore give an indication of a constitution capable of resisting multiple traumas, not just mastitis resistance. (e.g. We see many less foot problems here these days) The Americas and Australia have started looking beyond production records, seriously, only during the past 10 to 15 years.

Another important factor to take into account is the quality of the milk solids. This has received scant attention in some Australian systems. The red breeds tend to have 3.4%, or better protein, even under harsh climatic conditions. They also have a better Kappa Casein (bb or ab) rating than most other cattle, excepting only the French Normande breed. K rating is fundamentally an indication of the ratio between whey proteins and the more desirable calcium caseinate, in raw milk. This is important when manufacturing gourmet products, maximising calcium content, and in improving the taste, particularly for children and teenagers, as market research trials, which I have seen, both here and overseas, conclusively demonstrated.

In each of the four Scandinavian countries, every year about 300 young bull calves are selected as possible test bulls in each country, which are culled down to 100 before field-testing. Of this hundred, the top fifteen with positive proofs will be used for further breeding. With 20 to 25% of each national herd being made available to test bull matings the resultant improvement was spectacular, and the rest of Europe soon followed, although England was a bit slow, the first A.I. centre in the U.K not being set up until about 1940 at Dartington Hall in Devon, by the local farmer's union and South Devon breed society, I think, followed by the Dairy Shorthorn Soc. at Little Kimble in Buckinghamshire. They were getting all round general improvement

without pushing the exclusive merits of any one bull and then inbreeding to a restricted line of bulls, as is the tendency with North American systems. Later the English MMB (still a co-op) took over all AI., and set up major multi-breed centres.

After studying various breeding systems, I believe that the male heterogeneity has been one of the main strengths of A.I. sysms, as practised in Europe, and since Scandinavian countries have now started accepting each other's bulls more freely, they will become even more economically successful. On this subject, I would like to see greater access to Finnish lines here, in Australia.

At home, on Loden, all the current cow families were established by 1975 and we maintain a closed herd, on the female side. Since 1987 the herd has been bred entirely to A.I. bulls, both proven and proving. Mick selects bulls, which will, (he hopes), correct perceived weaknesses in the cows. He rarely uses more than 25 straws from any one bull. There are nearly 100 different bulls represented in the current herd. Results speak for themselves, culminating in the production of ARBBobdown, and six more A.I. proven sires, in succession. We also get a high proportion of the herd completing their sixth lactation before their ninth birthday. Few cows are kept beyond this age.

As a matter of interest, last year we sold a group of eight cows to a Friesian herd, as the owner's wife wanted to try out red cows. He did not think was a good idea. They are noticeably smaller than the Friesians, but against the Friesians they have come up with PIs ranging from 104 to 117

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This year we have just sold him a bull, and we've now got an order for another ten cows!