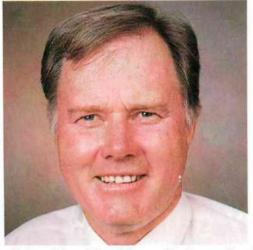
"Most of us will not live long enough to make the necessary gains by selecting straightbreds



.......Crossing with Chianina is the fastest way I know to make genetic gain and thus financial gain."



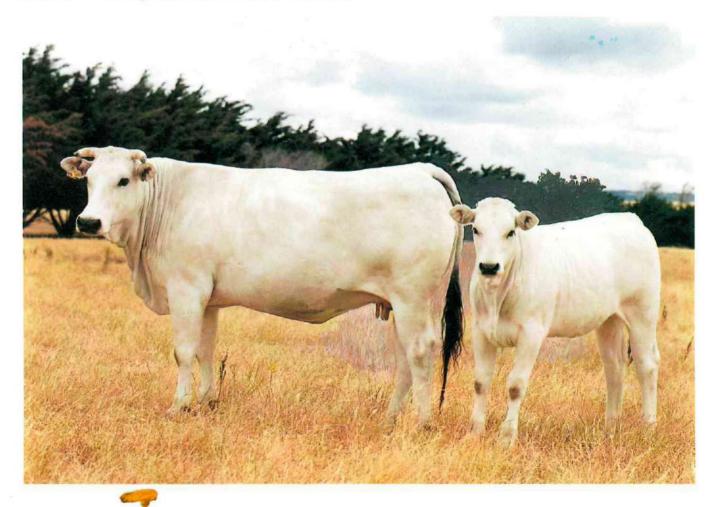
Wally Peart Chairman Cattle Council of Australia

Wally has used Hereford, Brahman and Sahiwal in his crossing program with the Chianina. He runs 1600 Chianina infused cows 180 kms north of Roma.

The traditional beef herd has relied on selection within a straightbred herd for any improvements in herd productivity that were made via breeding. However, trials clearly show that crossbreeding is the quickest method to lift production of a beef cattle herd. Crossbreeding produces faster changes than selection within a straightbred herd. A small efficient crossbred cow, when crossed with a large, fast growing, well muscled, terminal sire will produce a calf that will put more money in your pocket.

The Chianina breed possesses the qualities to provide the leaner carcase that today's consumer is demanding. Chianina will increase the growth potential and decrease total carcase fatness of conventional breeds more in one generation than any other breed.

The introduction of AUS-MEAT and improved marketing through the CALM system has increased the emphasis being placed on carcase quality. These innovations will ensure that cattlemen producing carcases suited to market requirements will be well rewarded.



WHY CROSSBREED WITH CHIANINA?

HYBRID VIGOUR - THAT LITTLE BIT EXTRA FROM CROSSBREEDING

Hybrid vigour is the extra advantage you get from crossing cattle of different breeds. This little extra is over and above the combination of attributes from those breeds. It means that the crossbred calves will be better in many respects than the average of their parents.

SPECIALISATION OF MALES AND FEMALES

One of the largest costs of producing beef is the feed cost of maintaining the cow. A most efficient beef production system is a small cow that has low maintenance food requirements, producing a fast growing calf. Chianina bulls when crossed with highly fertile, high milking, smaller cows will produce those fast growing calves with an optimum amount of fat for today's health conscious market.

THE BEST OF BOTH WORLDS

Chianina attributes can be added to the best attributes of other breeds to custom design an animal that best suits your environment and meets the demands of your market.



Chianina bulls are highly fertile

Commercial Cattlemen are Crossbreeding with Chianina



Quentin runs a 2000 cow operation on the eastern edge of the Northern Tablelands of NSW. The Chianina influence began at Pleasant View some 12 years ago.

"Percentage Chianina bulls produce calves which are far superior compared to the straight bred calves. The improved weight gains of the Chianina cross mean more kilos of beef, more money in your pocket and in today's economic environment that really counts. By using a Chianina cross we are able to market our calves 3 months earlier than the straight bred Angus cattle."

Quentin Braund Pleasant View, Ebor, N.S.W.

Chianinas were introduced into the extensive operation at Lundavra in 1973. "The results of the Chianina / Angus criss cross have been very successful, producing cattle well suited to the trade and to our locality. The crossbred cattle handle very well, are highly fertile and produce calves that turn off at a rate more than comparable with other crosses that are used locally."

In 1986 Lundavra bred the Grand Champion led steer at Brisbane and Rockhampton, with numerous successes in hoof and hook classes. At this year's Goondiwindi Show most of the major awards went to Lundavra where in a strong class of 21 heavy vealers they took out 1,2 & 3 placings as well as Champion vealer on the hook - all of which are a clear indication of the carase qualities of Chiangus cattle.



Peter Ward Lundavra, Goondiwindi, Qld.



Greg Lithgow Koala, Chinchilla, Qld.

The success of the crossbreeding operation at Koala is clearly shown by their constant wins in carcase competitions throughout Queensland.

"In our experience in crossing Chianina bulls over British bred cows and subsequent crossing with the F1 progeny, we have animals that are hardy, have high tolerance to blight and eye cancer and can walk long distances to feed and water.

The Chianina crosses have produced far superior carcases to the British breeds, with better muscle, more length and heavier weights at the same age. The Chianina crosses have been able to finish easily on grass or crop at 20 to 30 months of age with ideal fat cover for the Japanese chiller trade."

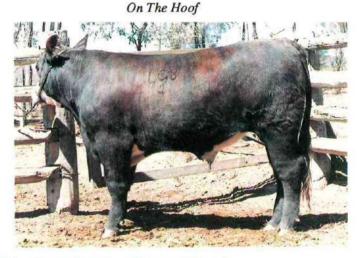
What does CHIANINA Offer? — Th

GROWTH RATE

In breed comparison trials in the USA, Australia and New Zealand, Chianina sired calves have had some of the fastest weight gains of all breeds.

| Breed | No | Initial live wt | Average I 19-20 mo | | |
|-------|----|--------------------|-----------------------|------|-------|
| СхН | 60 | 229.7 | 0.61 | 0.55 | 558.7 |
| CxBH | 56 | 241.5 | 0.62 | 0.50 | 563.0 |
| BxH | 50 | 218.2 | 0.65 | 0.43 | 530.4 |
| HxBH | 56 | 228.7 | 0.54 | 0.45 | 509.6 |
| HxH | 59 | 205.2 | 0.52 | 0.45 | 481.4 |

Key: C - Chianina H - Hereford; B - Brahman Source: Queensland Dept of Primary Industry N.B. Chianina cross steers were 18% heavier than straight British breed steers and 6% heavier than Brahman cross steers.



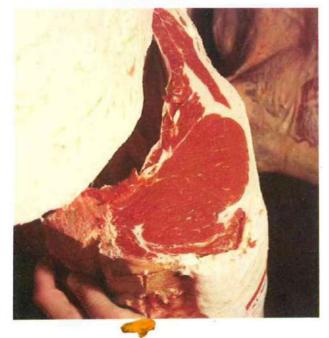
CARCASE SUPERIORITY -Genetically trimmed beef

Chianina sired calves produce carcases with low fat levels, heavy carcase weights, high dressing percentages and superior yield of saleable beef to most of the other breeds used for beef production.

| Breed No | | Hot Carc. wt (kg) | | Eye ABCAS oth Musc. n) Area (sq.cm) | | | |
|----------|----|----------------------------|------|--|------|--|--|
| CxH | 43 | 309.2 | 6.6 | 78.7 | 67.9 | | |
| CxBH | 43 | 307.8 | 7.0 | 80.8 | 70.8 | | |
| BxH | 47 | 290.8 | 11.6 | 68.0 | 57.2 | | |
| HxBH | 41 | 278.2 | 10.2 | 69.6 | 62.7 | | |
| HxH | 47 | 259.8 | 9.6 | 65.2 | 60.6 | | |

Key: C - Chianina; H - Hereford; B - Brahman Source: Queensland Dept of Primary Industry * Australian Beef Carcase Appraisal System

| On | The | Hook |
|----|-----|------|
| | | |



| Breed | Lean protein (kcal) | Inter muscle fat (kcal) | Total (kcal) | Lean & intra muscle fat (kcal) |
|------------|---------------------|-------------------------------|--------------|--------------------------------------|
| | (Real) | Idi (Redi) | (MCM) | (Meth) |
| JerseyX | 79 | 180 | 305 | 125 |
| Her X Ang | 81 | 172 | 294 | 123 |
| Red Poll X | 80 | 177 | 297 | 120 |
| Simm X | 84 | 156 | 273 | 117 |
| Chianina X | 86 | 155 | 265 | 111 |

Source: Clay Centre, Nebraska, USA.

- Calorie content

Trials done by Texas Tech. University, Lubbock, Texas have shown that Chianina beef had lower calorie content than other meat products.

| riied Ciii | cken - skin off | |
|------------|-------------------|--------|
| Pork | | |
| Beef | 100 | 1 |
| Turkey - s | skin on | Fair W |
| Lamb | | 18.2 |
| Turkey - s | kin off | |
| Roasted C | Chicken -skin off | l. |
| CHIANIN | A LITE BEEF | |
| 0 | 100 | 200 |

economically important characteristics

CALVING EASE

The long bone and flat muscle combined with freedom from double muscling means that Chianina sires cause less calving difficulty than other popular terminal sires. Additionally Chianina cross cows have less calving difficulty than other crosses.

| Sire Breed | Calving Difficulty % | | | |
|-------------|----------------------|--------------|--|--|
| | Angus Dam | Hereford Dam | | |
| Charolais | 15 | 24 | | |
| Simmental | 8 | 16 | | |
| Maine-Anjou | 13 | : 24 | | |
| Chianina | 11 | 10 | | |

| Source: | Ruakura | Research | Station, | New | Zealand |
|---------|---------|----------|----------|-----|---------|
|---------|---------|----------|----------|-----|---------|

| Breed | No | Calving | Calf | Crop |
|-------|--------|--------------|--------|--------|
| | Births | Difficulty % | Born % | Wean % |
| НХА | 438 | 16 | 91 | 84 |
| RPX | 461 | 17 | 90 | 79 |
| CX | 475 | 11 | 93 | 86 |

Source: Clay Centre, Nebraska, USA.

Key: HXA - Hereford x Angus; RPX - Red Poll cross;

CX - Chianina cross



Chianina have been selected for many years for characteristics that mean they survive and produce calves every year - sound feet and legs and a good udder as seen on this cow are but some of the attributes.



Chianina are intelligent cattle and good managers find them docile and easy to handle.

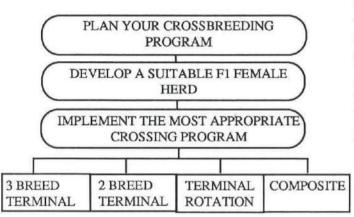
FUNCTIONAL SOUNDNESS

The Chianina breeder who applies production criteria to his culling program usually finds that cows are culled for old age. This is because the soundness and environmental adaptability of the Chianina results in cows that breed fast growing calves every year. Chianina have been selected for many years for the characteristics that make them profitable:

- * Strong correct legs and hard hooves with an ability to walk long distances to feed and water.
- * Black pigmentation of the skin eliminating eye cancer and other skin diseases.
- * High tolerance to bloat.
- * Heat tolerance due to short white coat and a greater number of sweat glands.

PROGRAMS TO USE WITH

PLANNING YOUR CROSSBREEDING PROGRAM WITH CHIANINA



FIRST CONSIDERATIONS

Plan to make best use of the attributes of Chianina that are the most valuable to a crossing program. These attributes are the high growth rate and the superior carcase characteristics. Maximum advantage will come from using Chianina as a terminal sire but an alternative crossing program using Chianinas may prove more useful to you.

A check list to see if you can use a terminal sire:

* Have you a good supply of replacement females?

Or

* Can you breed your own replacements and use Chianina on part of your herd?

CHOOSING THE FEMALES TO COMPLEMENT YOUR CHIANINA SIRES

The cows that best suit your crossbreeding program with your Chianina bulls will be those that conceive at an early age, calve unassisted in the paddock, breed regularly at 12 monthly intervals and give sufficient milk to rear a heavy calf. Remember that very heavy milking cows may have trouble getting back in calf if nutrition is not adequate so a moderate level of milk may be the most appropriate for your farm. A strict culling policy for cows that fail to conceive will soon adjust the level of milk that is most appropriate once you have chosen suitable breeds.

THREE BREED TERMINAL CROSS

A three breed terminal cross system uses a crossbred cow of two breeds, best suited to the farm and able to express heterosis for fertility and maternal traits. This cow would preferably be medium to small weight to minimise the maintainance feed requirements. Chianina can then be used as the terminal sire breed to give the calves rapid growth rate. The type of cows that may be useful in crossing programs with Chianina bulls will depend on the environment and the market requirements.

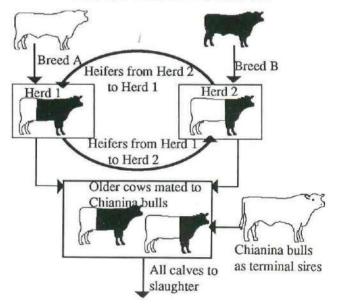
TWO BREED TERMINAL

For those that don't want the hassle of replacing the crossbred female the alternative is to simply use straightbred cows as the dams in the terminal sire program. A portion of the herd is used to breed replacements and another portion (probably the older portion) is crossed with the terminal Chianina sire. The straightbred cows will not have the same fertility and maternal ability of crossbred counterparts but the expense and other problems of replacing crossbred females is eliminated.

TERMINAL ROTATION

One of the major problems facing any crossbreeding program is the replacement of breeding females. F1 females must be bought in or bred in another herd. An alternative strategy is to set up a rotational breeding program to generate replacement breeding females, then use the oldest cows from the rotation with a terminal sire, the progeny of which all go to slaughter. Replacements are bred in the herd overcoming the need to buy them in. However, the females from a rotational program will only exhibit about 2/3rds of the heterosis of the F1 female.

Rotational Cross with a terminal sire



YOUR CHIANINA SIRES

CHIANGUS - the best of both worlds from two great breeds - CHIANINA + ANGUS

The Chianina Society is fostering the development of a composite of two breeds to form a new breed which will allow cattlemen to take advantage of the combined benefits of both. The Chianina breed offers very high growth rate and superior carcase qualities while the Angus is well established in the Australian industry as a highly fertile, high milking breed that is well adapted to production on grass.

WHY DO WE NEED A COMPOSITE?

There are many situations where it is inconvenient or uneconomic to use a continuous crossbreeding program. In this situation some of the advantages of crossbreeding can be used through a composite breed where Chianina is used in combination with one or more other breeds to form a new breed which has a percentage of genes from each of the parent breeds. Chianina can be used in combination with other breeds to give the composite breed extra growth and better carcase characteristics. The choice of which other breed will depend on the environment and the market for which you are aiming. In North Queensland the Brahman (Bos indicus) breeds have successfully been used with Chianina to form a type of cattle that has rapid growth and excellent carcase but can withstand the stress of heat and ticks. NSW and Victorian breeders who are aiming at a lighter market and don't have a severe environment will probably choose a British breed to form a composite with the Chianina.

WHAT IS A CHIANGUS?

A Chiangus is a cross between Chianina and Angus. The animal must be black, polled (or scurred) and contain no other breeding than Chianina or Angus. The first cross and later crosses, providing the animal contains no less than one quarter and no more than three quarters of either breed, are known as a Chiangus and will be eligible for showing.





John Adams

Murrindindi Station, Yea, Vic.

Murrindindi Station has been breeding Chianina since the first introductions in the early 70's and are presently involved in a Chiangus breeding program. "We have found that the Chianina-Angus cross produces excellent lines of calves which are generally black and are sought after by local butchers." Numerous wins in carcase competitions with Chiangus have impressed many cattlemen in this part of the country.



Nunkeri Downs Pastoral Co. Padthaway, S.A.

Bryant started crossbreeding after seeing the exceptional size and muscling of the Chianina-Angus cross.

"We find that our Chiangus calves have a growth rate far superior

to the straight bred animals we used to have.

One of our bull buyers finds that the Chianina-Angus bull will produce calves that are usually one month ahead of their straight bred counterparts at 4 months of age."



Doug Corker

Wacka-Doo, Boyup Brook, WA.

Doug is involved in a crossbreeding program 320 km to the south of Perth.

"Crossing Chianina with our Shorthorns has returned \$60 per head more,

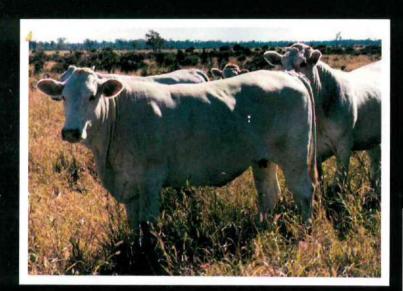
at 8 months of age than the straightbred shorthorn calves.

The Chianina cross produces a carcase that today's housewife is demanding.

The commercial Angus breeder can have a 6+ in the first generation of crossing with Chianina."



CHIANINA — 'The Profit Maker'



Chianina X Brahman



Chianina X Hereford



Chianina X Charolais



Chianina X Angus



Chianina X Sahiwal

The Chianina Society encourages its members to use BREEDPLAN as a service to their bull buying clients. For further information regarding Chianina and for a directory of bulls available for sale please contact the:

Executive Secretary, Chianina Society, c/o ABRI, University of New England, Armidale. 2351 Tel: 067 732244, Telex: 66629, Fax: 067 725376

Produced by Terry Carlon for the Chianina Society of Australia Technical assistance provided by Wayne Upton Beef Breeding Specialist NSW Department of Agriculture ABGU, UNE, Armidale