Welcome To Hungary

In September 1999 I accepted the opportunity to make a presentation on BREEDPLAN to the Hungarian Cattle Breeders’ Association. The venue chosen was the elegant room of mirrors in Budapest.

Assisting me in the presentation was Dr Istvan Komlosi of Debrecen Agricultural University. The exercise was a success and the first database for Hungarian Charolais has now been analysed using GROUP BREEDPLAN. Other beef breeds in Hungary with significant numbers are Hungarian Grey, Simmental, Limousin, Hereford and Angus.

Hungary has implemented a national cattle identification scheme using bar-coded tags and is seeking to increase the number and quality of its beef cattle to supply the lucrative European Union market. The introduction of BREEDPLAN to Europe is a significant milestone in the international acceptance of the BREEDPLAN technology and of genetics evaluated with this technology.

Murray Scholz and Peter Paine did a magnificent job in installing the American Hereford Association (AHA) system on schedule in Kansas City in October 1999. The AHA database includes over 21 million animals.

The American and Canadian Murray Grey Associations have both commissioned ABRI to install their pedigree/performance systems during year 2000. This means that Murray Grey associations in Australia, New Zealand, UK, USA and Canada will all be using BREEDPLAN software by the end of year 2000. This will greatly assist the Murray Grey breed in its goal of conducting routine worldwide evaluations of Murray Grey genetics.

Beef prices are rising at last after a string of shocking years and many seedstock herds are reporting strong demand and better prices. For the many hundreds of seedstock producers who have stuck with their BREEDPLAN recording programs through all the lean years, I trust that there will now be an opportunity to enjoy some significant and sustained financial benefits.

Arthur Rickards

Features

- Web Sale Catalogues
- New Homepage
- Philippines
- New Zealand
- BreedObject
- New Calf Weighing Cradles
- DNA Sire I/D (Multiple Joinings)
- New Recording Software
Editorial

Looking back through the files as I compile this, I note it is the 10th annual newsletter I’ve edited. Is there an award – have we made progress? There certainly seems plenty of progress, as there should be in that time (see Page 13). We didn’t even have fertility or carcase EBVs in 1990, let alone email and Internet data transmission options.

This issue updates on the new BREEDPLAN website and exciting options to use the Internet for sale catalogues and BreedObject. (Pages 12, 15).

Two new calf weighers have been commercialised in Australia recently. They will greatly simplify this task which is at times difficult and dangerous, especially in extensive situations. (Page 5).

We wish the new MSA beef grading scheme well, as this important Australian initiative is launched around the country. The main aim is, of course, to improve beef quality, consistency and description for our consumers but feedback to the seedstock industry is an important extra possibility. Our new National Livestock Identification System (NLIS) is being pushed along. This should provide opportunities for better feedback systems, but we can’t expect it to be automatic. Only data from like treated cattle is useful and we still need accurate measurements.

Finally, welcome to our expanding group of international clients. For you, and Australian members, feedback is always welcome via (breedplan@abri.une.edu.au).

New Homepage

http://breedplan.une.edu.au

The homepage for the BREEDPLAN website has recently had a significant upgrade. An improved format for the material on the site is now being progressively implemented, together with new material.

The main menu items are:

- **INTRODUCTION** – two introductory BREEDPLAN docs (also in Spanish)
- **EDUCATIONAL and TECHNICAL** – all the BREEDNOTES, slide sets, plus an expanding menu of technical papers (eg. from Feeder Steer School 2000)
- **SIRE SELECTION SERVICES** – to search and list sires by various criteria
- **DOWNLOADING FILES** – access to your files once a password is established

Other areas are

- **NEWSLETTERS**
- **WHAT’S NEW**
- **LINKS** and **SPANISH**

I hope this system will speed up and benefit your visit to the site. Feedback welcome.

BREEDPLAN Expo And Feeder Steer School - Proceedings and Papers

Proceedings from the well received Biennial BREEDPLAN Expo in Armidale, July 1999 are still available. $20 from New England Agricultural Secretariat, 126 Barney Street, Armidale, Ph (02) 6772 9160.

The 6th Annual ARMSIDE FEEDER STEER SCHOOL this February, was again booked out and very successful. There were several BREEDPLAN related topics which are now on the BREEDPLAN website (“BREEDPLAN Latest Developments”, Brian Sundstrom; “How much is a high performance Sire worth?”, Brian Sundstrom; “Multibreed EBVs, Where are we up to with the Science”, Hans Graser; “Thoughts on Multibreed EBVs”, Alex McDonald; “Balancing Growth Carcase and Fertility”, Peter Parnell). Full copies of these proceedings, also $20, are available from Peter Dundon – Beef CRC, UNE, Armidale, (02) 6773 3981. There are also good sections on Markets, Nutrition and Meat Science.

AND a free one – BEEF MARKET SPECS 1999. This is also a very good booklet, with a full list of specs for feeder and slaughter cattle and buyer contacts. Also good sections on MSA, Ossification etc. Prepared by David Allerton, NSW Agriculture at Grafton and soon to go on the Web (NSW Agriculture). Contact me for a copy.
Consolidating Breedplan Links To The Philippines

Arthur Rickards

In September 1999 a second group of 16 representatives of the Federation of Cattle Raisers Association of the Philippines visited Rockhampton for training in artificial insemination and embryo transfer. The course co-ordinator was John Croaker (GM of Australian Brahman Breeders' Association). John is a frequent visitor to the Philippines where he has run selection clinics and seminars on BREEDPLAN.

Again the independent evaluation was very positive and the reaction of trainees was summed up by Dr Marfe Paluga, “Thanks for the thoughtfulness and kindness you have extended to us. We will always be grateful for the excellent training.”

During year 2000, ABRI will commence building up databases on ruminants in the Philippines under a project generously funded by the Australian Centre for International Agricultural Research.

Australia has a large trade surplus with the Philippines and this is causing some tensions with our large live cattle and beef trade. It is therefore very important that the Australian beef industry goes out of its way to assist the Filipinos to develop the infrastructure of their own cattle industry as well as utilising imported cattle efficiently. Consistent with this the Australian Registered Cattle Breeders’ Association (ARCBA) has opened its membership to the Federation of Cattle Raisers Association of the Philippines.

Dr Russell Miller of QDPI's Beef Breeding Services put together a hands-on course in artificial breeding technologies and the trainees saw these technologies being practised in a number of BREEDPLAN herds. Further training relating artificial breeding to herd and national genetic improvement programs was provided by the Tropical Beef Centre, Richard Apps and by AGBU.

An independent evaluation of the course gave it a 5 star rating in terms of participant satisfaction. The spokesman of the trainee group, Dr Edwin Villar, emailed back to say “Thank you very much for the attention, the opportunity and the memories!”

DrIso Montalvan receiving her course graduation certificate from Bob Wilson of PASTT
Feilding, in the south of our North Island, is a major weaner selling centre. This autumn, the agents, vendors and interested stud breeders have combined to provide extra information to buyers. All pens by sires with BREEDPLAN EBVs will have the following information displayed on a card:

We decided to start with the weight EBVs this year then expand to describe more traits next year. Literature explaining the concept was available, and a committee checked the information presented.

<table>
<thead>
<tr>
<th>SIRE BREED</th>
<th>ANGUS</th>
</tr>
</thead>
<tbody>
<tr>
<td>TRAIT</td>
<td>Sire EBV Value</td>
</tr>
<tr>
<td>400 day EBV</td>
<td>+65</td>
</tr>
<tr>
<td>600 day EBV</td>
<td>+80</td>
</tr>
</tbody>
</table>

Reducing Calving Loss in Dairy Cows Joined to Beef Bulls

The Dairy industry is a major bull market for many New Zealand beef cattle studs. I have recently prepared an information sheet for Dairy farmers outlining the costs associated with calving difficulty and the benefits of using BREEDPLAN information when buying bulls or semen.

The budgets show a loss of $500 to $2000 due for each dead calf, depending on whether the cow is lost or traumatised sufficiently to reduce milk production.

The use of Birth Weight and Calving Ease EBVs are then explained. Please contact me if you would like copies for clients.

New Catalogue Format

The following concept was tried successfully at a combined Hereford and Angus bull sale at Taihape last year.

Advantages:

* Removes the confusion of a lot of figures, yet contains all the information required to make an informed genetic decision
* At a glance, it displays the approximate breed average for each of the traits
* If required, EBVs and accuracies can be incorporated, by superimposing upon the bar graphs, as can possible movement in the EBV at the stated degree of accuracy
* It displays all EBVs as positive (negative figures are regarded as undesirable by many breeders)
* Percentile bands to present an instant picture of where the animal ranks, within the breed

Russell Priest

Russell Priest

The computer called you an OUTLIER, but you didn’t get back to your breed society office to get your figures checked, so I’ve been given your “stellar”. You’ll have to wait another year before you’ve given any.

Why haven’t I got any “stellar”?

I like that big handsome hunk across the fence, but I guess we’ll have to put up with what we’ve been given.

The following concept was tried successfully at a combined Hereford and Angus bull sale at Taihape last year.

Lot Taihape Sale-a-bull 123

Percentile Bands %

Economically Relevant Traits

Advantages:

* Removes the confusion of a lot of figures, yet contains all the information required to make an informed genetic decision
* At a glance, it displays the approximate breed average for each of the traits
* If required, EBVs and accuracies can be incorporated, by superimposing upon the bar graphs, as can possible movement in the EBV at the stated degree of accuracy
* It displays all EBVs as positive (negative figures are regarded as undesirable by many breeders)
* Percentile bands to present an instant picture of where the animal ranks, within the breed

Russell Priest +

New Zealand Focus

National Beef Genetics Co-ordinator - 64 6 323 4484 – RG-JNPriest@xtra.co.nz
**Calf Weighing**

Two New Commercial Calf Weighing Cradles

The cradles shown below have been recently released on the Australian market. They can both be attached to a range of vehicles, such as tray tops, tractor “carry alls”, and most importantly, 4 wheeler bikes. Calf weighing is particularly suited to these bikes, with their automatic clutch, all terrain features and ease for the operator to quickly get off and catch the calf.

**THE ABRI/HARTMANN CRADLE**

This cradle is used with standard electronic weigh beams. With the cradle set close to the ground, calves can be “rolled” into it, virtually eliminating lifting. Calves generally lie very quietly on their back, a position they are used to in utero. The cows are generally therefore also not stressed, but a quick release system can be used to instantly free the calf if needs be. The calf rolls out, and the weight is retained on the scales, which of course only need a few seconds to record a weight.

The cradle was developed by Michael and John Hartmann with their commercial herd near Guyra. It is being manufactured by Rudd Engineering, Guyra. Marketing is exclusively through ABRI. Contact: Michael Hartmann (02) 6773 2472 Email: m.hartmann@abri.une.edu.au

**THE W.O.K. CRADLE**

This cradle has been developed by Warwick Vinge, who refined it while weighing calves on “The Glen” Murray Grey stud near Albury.

A key feature is that the operator doesn’t have to lift the full weight of the calf which is placed in the cradle, when it is set low to the ground. (opp). ‘Gas lift struts’ help raise it to the weighing position.

The frame is very adjustable to allow fitting to a wide range of ATVs. Fitted to the back of a bike (as pictured below) allows the unit to also be used to take sick calves (eg. scour’s) to yards. With the calf comfortable and easily viewed, cows generally follow peacefully as the calf is carried along. The unit has a relatively inexpensive mechanical clockface scale. Contact: Warwick Vinge

Contact: Warwick Vinge (02) 6037 6250, 0427 376 250 (m)

Trevor Allen (02) 6037 1545, 0428 280 163 (m)
Breedplan in Action - “Willalooka”

A scorching wind and 38° - hardly the best conditions to visit “Willalooka”! I had scheduled to be in the area however and had long sought to visit this famous Murray Grey herd. Malcolm Macdonald, manager for 42 years, was most welcoming, and here is a glimpse of what I saw and learned.

Much of “Willalooka” is undulating and sandy scrub country. When the Adelaide based McGregor family purchased in the mid 1950s, it was partly cleared and running an Angus herd. Pasture development has been dependent on correcting trace mineral deficiencies (Cu, Co and Mo) and of course, adding plenty of Phosphorus. Once this is done, quite productive pastures can be maintained (1 cow/2 ha on the sand hill country). A small area of irrigation is mainly used to grow out young stock, and background steers.

The 170 Angus cows (“Belltrees”) were used as a base to grade up Murray Greys, commencing in 1965. Performance recording started in the mid 70s, producing a large data bank for BREEDPLAN in the mid 80s.

Malcolm, and more recently his daughter Debbie, manage the herd with a bull breeding BREEDPLAN nucleus. Top commercial heifers can also enter this herd. Some 700 heifers are joined as yearlings. The most fertile and productive on their first calf, are enrolled in BREEDPLAN. After closely monitoring a second calving, and EBVs, the tops graduate to the elite herd. All heifers are single sire mated to young bulls being progeny tested.

Steers wean around 280kg, and are then backgrounded on irrigation to feedlot entry at 20 months and 480-500kg (0.6-0.7kg/day). In recent years, they have gone to Charlton feedlot in Vic, for the Elders AMG program (Angus Murray Grey Gold).

“Aafter 180 days feeding, a high proportion reach 3+ marble score and are ideal for our Japanese customers”, says Dick Whale, Elders, IGM, who is closely involved with the herd. “Willalooka retain ownership up to the boned out product, to capitalise on their high marbling and yield characteristics.”

A NEW ANGUS STUD. A decision was taken a few years ago to also start an Angus stud. “We have always sought to broaden our base with compatible genetics”, said Malcolm. “I would like to see Red and Black Angus and Greys all on one database, and eventually one Society. This would allow maximum progress to compete with chicken and pork. We have carefully sourced Angus genetics with high marbling, muscling and maternal traits. This will probably build to a similar number of bull sales to our Greys. The commercial herd can use the best of both breeds. The Greys and blacks are basically run together, and we have of course also used some Angus in our Grey stud within Society rules.” [The first Angus bulls sold in February 2000, at the annual sale. Greys and Blacks both sold well for similar averages.]

Other points:

* “In this hard dry Summer/Autumn area, too much leanness can affect fertility. We need cows to carry plenty of condition into this period. (see also p20). Breed average milk is also plenty, as high milk means high maintenance cows.”

* “Our female fertility levels are very pleasing and also on the bull side. Many bulls are now single sire mated to up to 80 cows.”

* “Marbling scanning looks like being very useful. We test scan steers after 90 days to draft for long term feeding. The data also goes to BREEDPLAN along with abattoir data.”

* “Greys with a short sleek coat and light colour are very functional in hot Northern pastoral areas, an area to which we sell many bulls.”

* “Herd Magic is a great boon to our recording. We’ve at last managed to negotiate email data transfers through a couple of local phone exchanges.”

* “Our Greys perform?….I’ve not seen many lines beating our steers in kg of boned marble score 3 product.”

* “Plans are in hand to reestablish some wet land areas, and to tackle a salinity/rising water table problem. The latter is partly coming from elsewhere.”

Malcolm MacDonald with sale bulls.
“Bimbadeen” Brangus

Michael Hartmann

Bimbadeen Brangus Stud was started in the late 50’s by Bruce Burnham after he came home from school. Bruce observed that Angus cattle won most of the carcass and prime cattle competitions, but were struggling to do well in the central Qld environment. Observing the effect of using the then new Bos indicus cattle he decided to try the cross with Angus and was delighted with the results.

In 1959, the Australian Brangus Cattle Association was formed, and Bruce was a Foundation member of the fledgling Association. The stud he founded is the only original one still actively breeding and selling stud Brangus cattle.

Bruce and Barbara married in 1965 and like most young people with a family, had to work hard to consolidate and make progress. In developing a breed, especially one like Brangus, where the two parent breeds are so widely divergent, there was a great deal to be learnt. At the same time, coping with the beef depression and trying to stand on their own feet, they were on the lookout for any tools that would improve returns.

Here are some other comments from Bruce and Barbara.

- “Performance recording in the early 1970s, was still more or less in its infancy as far as practical application was concerned, but it looked a useful option to investigate”. In those days, performance recording put the main emphasis on growth. However, as was shown in many overseas examples, emphasis on just one trait led to many structural and muscling problems. From the beginning, because of trying to develop many traits at once in a new breed, we were advised that our progress would be slow. But we persevered in our conviction that growth was only one of the important economic traits and refused to select for growth alone.”

- “When the current BREEDPLAN started in the early eighties, we changed over to it, with a few headaches with matching the fairly large database. However with the help on our friendly BREEDPLAN staff, we finally managed it”.

- “We have been reaping some of the benefits of our perseverance in recent years. It is gratifying to have bull buyers actually interested in the BREEDPLAN figures on our animals, and even using them as a selection tool as the message is being spread further in the industry.”

- “BREEDPLAN has achieved more than just improving turnoff weights for our cattle. It has been instrumental in helping us identify our best and most productive and fertile females.” This environment is fairly typical of the southern part of Central Queensland - without some of the very extreme heat, but fairly warm nevertheless! We also experience some rather severe frosts at times and there is always at least one period of extreme stress during the year. Females in this situation have to calve, rear the calf and re-breed within the twelve months without assistance. This is a most important selection tool in our environment as well as weaner weights. So our females are selected on their milk plus calving intervals.

- “We are looking at measuring more traits this year, principally EMA and fat cover. Bulls have a yearly check for reproductive soundness and scrotal size and heifers are pregnancy tested before the end of the breeding season. In recent years we have been selecting for EMA and fat cover to improve yields. More work is intended on marbling this year.”

“Bimbadeen” now turns off about 250 heavy steers for the Japanese markets per year plus about 60 bulls off pasture, mostly improved. They use the best performance bulls in the commercial herd. About 60-70 steers are lotfed each year to get complete carcase feedback particularly on EMA and marbling.

Ever enthusiastic performance recorders, the Burnhams are now awaiting with anticipation the production of the first “Brangus GROUP BREEDPLAN”, the next step in the evolution of BREEDPLAN for the Brangus breed.
Queensland Developments

Cloncurry Demo On Target

Another Qld demonstration trial for BREEDPLAN has come up with positive results. The Qld DPI (Felicity Hill) and Nth Qld BIA combined forces in this demonstration on Alister McClymont’s “Wernadinga Station”, near Cloncurry.

350 Brahman heifers were inseminated to High and Low growth Brahman bulls. The calves were born in 1996, and the steers finished and slaughtered in May 1999.

<table>
<thead>
<tr>
<th></th>
<th>Wean (kg)</th>
<th>Final Wt (kg)</th>
<th>$</th>
</tr>
</thead>
<tbody>
<tr>
<td>“HIGH” steers</td>
<td>160</td>
<td>595</td>
<td>669</td>
</tr>
<tr>
<td>“LOW” steers</td>
<td>159</td>
<td>554</td>
<td>628</td>
</tr>
</tbody>
</table>

“The High bulls were on average 40kg higher for 600 day wt EBVs, than the Low bulls”, said Felicity. “Given that the bulls contribute half the genetics, we would expect an extra 20kg at 600 days, and a little more by our later slaughter age. The extra 41kg was even a little more than expected.”

“The $ difference would of course be higher at current prices.

Belmont Red Links With Bonsmara Enhanced

In previous issues we have reported on the initiative between the Australian Belmont Red Association and the South African Bonsmara Society. They have taken the first steps towards a combined international genetic evaluation for these two very similar breeds.

During 1997/98 three Australian Belmont Red breeders imported a total of 120 Bonsmara embryos and implanted these in cows of their BREEDPLAN herds. In turn, Belmont Red semen has been used in South Africa. The first calves were born in both countries in November 98.

The aim of the project is to develop a common genetic evaluation for these tropical breeds, and to give breeders in both countries, access to cattle well described on the same base.

The three Australian herds have continued to strengthen their Bonsmara links with further AI/ET in the recent 99/00 joining. Semen from a Bonsmara bull used at Clay Centre in the US will also be used.

An ACIAR funding proposal is steadily progressing. This will hopefully be used to do more detailed cow adaptation and carcase studies in both countries. The necessary recording system will also be developed, hopefully allowing a joint analysis in 2 to 3 years.

Bonsmara cattle being inspected at a Field Day on “Mt Eugene”, Belmont Red stud in central Qld. 130 AI and 50 ET calves are expected this year. “The main benefit”, says principal Geoff Maynard, “will be to select the tops from a much bigger pool.”
Tropical Cattle Technology

Richard Apps

Tropical Cattle Technology Services is a joint initiative between eight tropical beef cattle societies, whose members breed the majority of bulls going into northern Australian beef herds, Meat & Livestock Australia’s North Australia Program and the Agricultural Business Research Institute.

Extensive travel throughout Queensland and NSW, with short trips to the Northern Territory, Victoria and Western Australia, has seen me deliver training and extension activities to over 2000 beef producers in group and one-to-one situations.

Work has been primarily in the areas of genetic evaluation and animal selection, herd recording and PC applications.

A key goal of TCTS is to develop utilisation of GROUP BREEDPLAN by the tropical breeds. Substantial progress has been made in this area.

Table 1 shows the number of 1997 and 1998-born calves of the various breeds recorded on BREEDPLAN. Note that many of the 1997-born calves tend to be recorded on BREEDPLAN during 1998 calendar year.

The first (year 2000) target of having 16,500 calves recorded on BREEDPLAN has already been exceeded in the first year of the project and it is now anticipated that the doubling in BREEDPLAN use relative to the 1996 base will be achieved earlier than target date of year 2002.

The lower numbers, in some cases, for 1998 calves versus 1997 calves is a result of the delayed manner in which some herds submit data.

Simbrah and Charbray numbers are not presented in Table 1 as they are difficult to distinguish due to being included in the Simmental herd book in the case of Simbrah and in both the Charolais and Brahman herd books in the case of Charbray.

SIRE SELECTOR SERVICES. Several Tropical breeds now have websites with Sire Selector systems to search their BREEDPLAN database. If you don’t have the society address, an easy entry to these sites is via the link in main BREEDPLAN site. http://breedplan.une.edu.au.

GROUP BREEDPLAN. 1999 saw the Droughtmaster breeders undertake their first GROUP BREEDPLAN analysis, an important step for one of the largest breeds in the northern industry. The Brangus and Braford breeds are currently testing their data bases for GROUP BREEDPLAN.

Richard has represented the tropical breeds internationally through participation in the training program for Filipino groups - see page 3 for full story.

Table 1: No. of calves recorded on BREEDPLAN compared with TCTS targets

<table>
<thead>
<tr>
<th>Calving Year</th>
<th>Brahman</th>
<th>Santa Gertrudis</th>
<th>Droughtmaster</th>
<th>Brford</th>
<th>Brangus</th>
<th>Belmont Red</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1997</td>
<td>7134</td>
<td>6264</td>
<td>1076</td>
<td>358</td>
<td>1167</td>
<td>2930</td>
<td>18929</td>
</tr>
<tr>
<td>1998*</td>
<td>7400</td>
<td>6203</td>
<td>1614</td>
<td>65</td>
<td>1342</td>
<td>2778</td>
<td>19402</td>
</tr>
<tr>
<td>2000 Target</td>
<td>6000</td>
<td>5000</td>
<td>1500</td>
<td>600</td>
<td>1000</td>
<td>2400</td>
<td>16500</td>
</tr>
<tr>
<td>2002 Target</td>
<td>8200</td>
<td>6600</td>
<td>3000</td>
<td>1200</td>
<td>1500</td>
<td>3000</td>
<td>23500</td>
</tr>
</tbody>
</table>

* some herds 1998 calf weights are yet to be submitted

Queensland and NSW, with short trips to the Northern Territory, Victoria and Western Australia, has seen me deliver training and extension activities to over 2000 beef producers in group and one-to-one situations.

MLA is co-funding the enhancement of cattle breeding technology services to tropical breeds.
CRC II

As outlined in last year’s newsletter, the continuation of the Meat Quality CRC into a second term – CRC II – has been given the go ahead.

The research groups have finalised project areas and several experiments are underway. One of the biggest is a Northern breeding program involving the major pastoral companies:

- Australian Agricultural Company
- Balmoral Stations Pty Limited
- Consolidated Pastoral Company
- GRM International Pty Limited
- Heytesbury Pastoral Company
- Hillgrove Pastoral Company
- S Kidman and Co
- Mt Eugene/Hazelwood Pastoral
- North Australia Pastoral Company
- Stanbroke Pastoral Company

Large numbers of Brahman and Tropically adapted composite females are being joined to sires with known meat quality traits (many from CRC I). This will investigate, amongst other things, the interaction between the selection for meat quality and ‘female functionality’ in our Northern environments.

One of the main researchers, Heather Burrow – CSIRO Rockhampton reports that several large AI programs have been performed this summer. Insemination rates were encouraging, but conception % is yet to be known of course.

Correlation Between Carcase EBVs On Cattle Grown Out For Different Markets And Either Grain Or Grass Finished

As outlined in previous newsletters the CRC straight breeding program provided information to develop the new BREEDPLAN carcase EBVs, including Intramuscular fat (IMF%). Currently, BREEDPLAN reports these EBVs at one weight endpoint, a 300kg steer carcase.

There have at times been questions as to whether sires would rank differently if these EBVs were developed for more than one market/weight. Eg. Domestic and heavy Export.

David J Johnston (AGBU) and other CRC researchers have analysed the results from 2550 Domestic weight and 4400 heavier Export weight CRC carcases. There were roughly equal numbers of Tropical and Temperate genotypes. IMF% and FAT DEPTH were the traits studied.

This study showed a genetic correlation greater than 0.9 for these two traits for the two markets i.e. sires evaluated for fat depth or IMF% at either market endpoint will rank very similarly for the other market. The earliest finishing progeny for the Domestic market will be the fattest at Export weights. The decision to use only one BREEDPLAN EBV endpoint (300kg) appears correct.

GRAIN v GRASS, IMF% RERANKING?

3428 Bos Taurus carcases were studied to investigate this question. The grain finished cattle averaged 5.3% IMF compared to 3.9% for pasture finish. The genetic correlation between the traits GRAIN IMF% and GRASS IMF% was nearly one, indicating sires would not rerank.

CARCASE IMF% HERITABILITY

These ranged from 0.30 to 0.46 for the different markets and finishing systems (grain v grass). Heritability was higher for the heavier and grain finished cattle. One recommendation from this is that the better condition seedstock cattle are in for IMF% scanning, or the fatter their slaughter progeny are at carcase evaluation – the better the genetic evaluations will be. These heritability estimates will contribute to the refining of the BREEDPLAN carcase EBVs.
**MSA Northern Crossbreds**

The CRC had a major crossbreeding experiment from 1996-2000. Brahman cows were joined for 3 seasons to either Brahman (BB) or seven other sire breeds including (Angus (AA), Belmont Red (BR), Charolais (CC), Hereford (HH), Limousin (LL), Santa Gertrudis (SG) and Shorthorn (SS)).

A total of 970 steers have now been assessed for MSA eat quality score (MQ4).

Breed effect:

<table>
<thead>
<tr>
<th>Sire breed effects on MQ4 score (n = 857)</th>
<th>(Ossification scores shown in brackets)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beef meeting consumer specifications</td>
<td></td>
</tr>
<tr>
<td>Angus</td>
<td>52.7</td>
</tr>
<tr>
<td>Brahman</td>
<td>58.1</td>
</tr>
<tr>
<td>Belmont Red</td>
<td>47.4</td>
</tr>
<tr>
<td>Charolais</td>
<td>47.3</td>
</tr>
<tr>
<td>Hereford</td>
<td>49.1</td>
</tr>
<tr>
<td>Limousin</td>
<td>48.4</td>
</tr>
<tr>
<td>Santa Gertrudis</td>
<td>47.1</td>
</tr>
<tr>
<td>Shorthorn</td>
<td>46.9</td>
</tr>
</tbody>
</table>

The steers are either finished in Qld or NSW feedlots or on grass in Qld.

As can be seen, the pasture finished steers have lower scores. This is thought to NOT be due to the pasture per se, but the fact that they are older. The pasture cattle had higher ossification scores (218) than the younger feedlot lines (150).

**Net Feed Intake (NFI)**

Investigations into the genetics of feed efficiency centre around the major MLA funded project at NSW Agriculture Trangie Research Station. This group is in turn part of the CRC, and extra studies are done on the “Trangie” and other CRC cattle at “Tullimba” feedlot. State research groups are also involved, particularly Hamilton and Rutherglen in Vic and VASSE in WA.

Feed efficiency is a major issue for the lot feeding industry, but also could deliver big savings to the grazing sector. (If you could run 10% more stock on a given area, or take 10% longer before having to supplement.)

The trait Net Feed Intake (NFI) is heritable (around 0.4) and it can be measured. The big question is how to economically test enough key sires to make an impact. A first step is to get sufficient bulls tested to allow the development of BREEDPLAN EBVs, but this is quite costly for the ‘pioneer studs’.

While central test stations will have a role, on-farm testing should be more economic in many cases, and give better genetic evaluation via bigger management groups. In last year’s newsletter I described the new Ruddweigh self feeder, commercialised from the CRC prototypes at “Tullimba”. This is now being used at test stations such as Rutherglen. It is also being trialed on-farm. An alternative self feeder, capable of measuring individual intakes on groups of electronically I/D cattle, has been developed at Hamilton (see photo). This has some different features such as using pelleted feed and an auger which allows measured introductory rations.

Such technology may help deliver this important new EBV to industry.

One technical issue to watch is the link between efficiency and leanness. This has been demonstrated in the “Trangie” steer lines (eg. 1-2mm leaner at Domestic market weights after one generation of selection). The genetic link is not so strong, it can’t be “bent”, but needs watching. As does any possible longer term effect on cow fertility. The “Trangie” cow lines have been set up to study this. Results will be awaited with interest.

Allan Clark, at Hamilton Research Centre with their modified Bunge self feeders. These are being commercialised by Agricultural Requirements, Gatton, Qld (07 5462 1177).
BreedObject on the web

Steve Barwick and Wayne Upton.

BreedObject, the tool that can help you use BREEDPLAN EBVs to breed more profitable cattle, is now available on the web. This is part of a plan to make the technology more accessible to both breeders and buyers of bulls (and other seedstock). The web project is the initiative of a Consortium headed by the Animal Genetics and Breeding Unit (AGBU) and including ABRI, breed societies through the Performance Beef Breeders’ Association, NSW Agriculture and Meat and Livestock Australia. Visit [http://breedobject.com](http://breedobject.com) to view the BreedObject website.

The BreedObject website encompasses:

- an independent listing facility for bulls and semen for sale at any time for any animals evaluated on BREEDPLAN, including ready access to all EBVs available on each bull

Listing of bulls on the system during the introductory phase of this project in 2000 is FREE to breeders and semen sellers of all BREEDPLAN breeds. Subject to any restraints on use of the data, listing is readily achieved on-line, or by contacting AGBU (email: wupton@metz.une.edu.au) and sending details.

- the ability to use BreedObject to describe and rank bulls for the expected profitability of their progeny for given production purposes and markets. This facility is FREE to all users.

Potential bull buyers can quickly assess the genetics of bulls on offer (eg. at stud sales, in paddock sales and at multi-vendor sales), make decisions about which sales to concentrate on, and short-list bulls (or semen) of interest.

Immediate breeder/supplier contact is facilitated through provision of all contact details, sale details and links to email or breeder/supplier home pages that may be available.

- a facility to identify and exclude animals with particular EBVs falling above or below levels considered desirable.

Results for animals failing EBV cut-offs appear in grey so these animals can be easily identified (see diagram). However, rather than excluding these animals from all consideration, the animals remain listed so that the cut-offs chosen can be continually re-evaluated.

A publicity campaign over coming months will increase awareness of the site by potential bull buyers of all breeds. There will be opportunity for all breeders to try the system and provide feedback. Other features and improvements will also be added. These will include facilities for listing female seedstock sales, for customising rankings to the production circumstances of individual users, and for ranking animals from breeders’ own herds (via a password-protected area) to aid selection within the seedstock herd breeding program. Planning is also underway to ensure that the system can be suitably accessed from within dedicated breed society services.

BreedObject on the web has the potential to increase the bull-buying clientele of BREEDPLAN herds by taking BREEDPLAN to a wider industry, including to many bull buyers with limited previous experience with EBVs.

**Note**

BreedObject is a development of the Animal Genetics and Breeding Unit (AGBU), a joint institute of NSW Agriculture and the University of New England. Financial assistance is provided by Meat and Livestock Australia. Further information on BreedObject on the web is available by calling AGBU on 02 67 733141, or by emailing sbarwick@metz.une.edu.au.
The Genetics Of Tenderness

David Johnston and CRC colleagues have had another look at the heritability of tenderness in the CRC cattle. They found that tenderness measurements are very influenced by abattoir conditions. Specialised data analysis techniques were therefore needed to identify the underlying genetic relationship. When the data was analysed in this way, the trait has shown to be a little more heritable than previously thought, but still relatively low (in the 5-15% range).

Even at this heritability, progress could be made if we could routinely measure tenderness on large numbers of carcases. Unfortunately, tenderness measuring is still a laboratory technique only suited to experiments such as the CRC. Another complication, is that different muscles in the carcass responded differently in the CRC research.

It seems some time off before we can easily and directly do tenderness selection within a breed. In the meantime, we can ensure tender product to consumers by following MSA practices. Indirect methods of genetic selection include improving temperament and marbleing. These have low to moderate genetic correlations with tenderness.

Genetic effort lifts profits

Steve Barwick

Recent work at AGBU has confirmed that the performance recording and selection effort in BREEDPLAN herds is increasing the profit potential of commercial cattle. Genetic trends in profitability are strongly positive in virtually all of the performance breeds that are part of BREEDPLAN. The trends were calculated using BreedObject, over the whole Society database. The trend in Herefords and Poll Herefords, for an export market, is shown in the accompanying Figure.

Although it is hard to accurately value the benefits across a whole industry, it is not overstating the position to say that the benefits of the genetic improvement made, since the start of BREEDPLAN, have been worth hundreds of millions of dollars to producers, processors or consumers of beef.

Dr. Hans Graser, Director of AGBU says, “It is clear from our work that rates of increase in the genetic potential for profitability have increased over time”. He said “This reflects the increasing performance recording effort in some breeds to record traits other than growth. This allows breeders to select animals more accurately”. Hans adds “While most breeds are making gains, those that have made the greatest effort in performance recording are making by far the greatest gains”.

Hans is quick to point out, that many if not all breeds, could be doing very much better. “While the industry’s investment in genetic improvement seems to be paying handsomely at the whole industry level, much more can be done”, he says. “Breeds with little performance recording other than for growth traits need to take the next steps to fertility and carcase trait recording. “A lot more benefit could be realised, without any extra cost, just by paying greater attention to the figures when selecting animals. This alone could greatly lift the benefits already being captured by industry".

A Marbling Gene Found?

As this newsletter goes to press, there is rumour that an Australian research group has identified a gene closely associated with marbling. If this rumour is correct, and it is an actual gene, which is segregating in useful populations (not a linked marker) it could be very significant. For genetic evaluation, it could enhance the current BREEDPLAN system, and save some of the time required in progeny tests needed for current linked markers. Future uses could include for example, to screen steers prior to lot feeding.

[Genetic Progress in Profitability in Herefords & Poll Herefords diagram]

*AGBU is a joint facility of NSW Agriculture and the University of New England. They are responsible for developing and maintaining BREEDPLAN software.
Diamond Select For Structure

Previous issues of this newsletter have shown the Diamond Select cataloguing concept. This was developed by the Western Angus (Vic) groups, particularly David and Wendy Kelly of “Barwidgee” (see bottom of diag below).

“Barwidgee” has taken it a step further to include structural assessments, which I think lend themselves to this visual presentation.

Note
These are not EBV’s, but visual scores done by experienced classers.

Lot 2  BARWIDGEE 98161

<table>
<thead>
<tr>
<th>ID:</th>
<th>98161</th>
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<tbody>
<tr>
<td>Born:</td>
<td>31-Aug-98</td>
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<tr>
<td>Frame Score:</td>
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<tr>
<td>Scrotal Circ (cm):</td>
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</tr>
<tr>
<td>Serving Capacity:</td>
<td>M</td>
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<td>Birth Wt (actual):</td>
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</table>

**STRUCTURE**

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<tr>
<th>Claw set</th>
<th>Less Favourable</th>
<th>Less Favourable</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
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</table>

**ANGUS GROUP BREEDPLAN**

<table>
<thead>
<tr>
<th>Birth Wt (kg)</th>
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<tbody>
<tr>
<td>200 Day Growth (kg)</td>
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<tr>
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<td>+66</td>
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<tr>
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<tr>
<td>Mature Cow Wt (kg)</td>
<td>+67</td>
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<tr>
<td>Milk (kg)</td>
<td>+12</td>
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<tr>
<td>Scrotal Size (cm)</td>
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<tr>
<td>Carcase Wt (kg)</td>
<td>+42</td>
</tr>
<tr>
<td>Eye Muscle Area (sq cm)</td>
<td>+2.0</td>
</tr>
<tr>
<td>Rib Fat (mm)</td>
<td>-1.4</td>
</tr>
<tr>
<td>Rump Fat (mm)</td>
<td>-1.3</td>
</tr>
<tr>
<td>Retail Beef Yield (%)</td>
<td>+0.2</td>
</tr>
<tr>
<td>Intra-Muscular Fat %</td>
<td>+0.3</td>
</tr>
</tbody>
</table>

**Breed Range**

<table>
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<tr>
<th>Breed Average</th>
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</thead>
<tbody>
<tr>
<td>+8.9</td>
</tr>
</tbody>
</table>

Extremely balanced EBV's from the recently deceased New Design 036. With his sires semen at $200/straw and hard to get don't miss this opportunity to acquire this outstanding 036 son.

Purchaser ___________________________ Price ___________________________

Scrotal Measurements

Remember 600 days is the cut off for scrotal measurements. The reason is that the measurements are largely to predict fertility of female relatives, so are best taken closer to puberty. We occasionally have disappointed members submitting records on cattle over this age, and hence not receiving EBVs.

Benchmarking Studs

In recent years commercial cattle breeders have followed the lead of the corporate business world by participating in benchmarking analyses to measure their cost of production and competitiveness. Until now however, I have not heard of a program designed specifically for studs. I wonder how many studs really know how much it costs to produce a bull to point of sale?

Mudgee-based consultant and stud breeder, Sandy Yeates has recently developed the NATIONAL SEEDSTOCK BENCHMARKING SERVICE for just this purpose. It will enable participants of all breeds to analyse the profitability of their stud enterprise with other enterprises on the farm and to compare their performance against other studs. Participants can set benchmarks to provide their businesses with production & financial targets.

The program which is currently being evaluated by a number of 'volunteer studs' will be launched in June and is suitable for individuals or groups. It has been well received with some Societies considering using it with groups of members. Sandy can be contacted on 02 6379 1079 or at sandy@lisp.com.au
New Web Catalogue Service

Murray Scholz and Christopher de Crespigny
(ABRI)

BREEDPLAN has recently developed exciting new enhancements to its cataloguing system. These allow ‘publication’ of sale catalogues, semen and AI sire lists over the Internet. The facility is made available to Breed Societies who can customise some features then manage and offer the service to members. EBVs and other information is extracted direct from Society databases. This is an excellent way for individual breeders or Societies to publicise sales, and provide a much greater range of information to clients. Some features include:

- users can sort/search lots with a Sire Selector system (see diagram below, sorted on 600d Wt; EMA and IMF%).
- direct links to breeder or Society sites can be used. Photos and extra descriptions can be added.
- catalogues for normal sales ‘expire’ automatically soon after the event. Semen lists etc can be put on for set periods.

Two of the first catalogues run on this system this March, were the 2000 Angus National Show and Sale, and the “Te Mania” Angus on property sale. Tom Gubbins from “Te Mania” was closely involved in customising the concept for Angus, with ourselves and the Angus Society’s Peter Parnell.

Commenting on his experiences so far, Tom says:

“We have had some great feedback from the Te Mania catalogue on the web. Some people have arrived at our sale without a normal catalogue, just a printout from the Web. The main benefit for us and discerning bull buyers is that they can search and sort the entire catalogue on all the BREEDPLAN traits.”

“The format is identical to other sales using the same system, for example, the Angus National Show and Sale. Therefore, the more techno-phobic within the community do not have to overcome fears of using too many systems. The catalogue on the web is very cheap to post and arrives on your client’s desk before the paper version even gets to the printer.”

Peter Parrell added: “I am also very happy with the high level of interest. Over three weeks, both these sale catalogues received over 2,500 ‘hits’ to pages/ lots from around 150 computers. Several other studs are currently negotiating to list their coming sales.”

If you are interested in using this option, contact your Society.

(As outlined on p12, AGBU is developing a web version of BreedObject. This will also have cataloguing options, with stock listed with their $Indices. I hope that this will in time be able to be combined with the new cataloguing system described above.)
As the cattle industry embraces the electronic age, Saltbush Software moves from strength to strength involving new features in traditional software, new software products and a new manager.

**Herd Magic 2000**

Herd Magic is the flagship product for Saltbush and it continues to be the system of choice for Australia’s leading stud cattle breeders. The Saltbush team has been working around the clock to bring out a new version of Herd Magic for Beef 2000. Wizards have been introduced throughout the program to guide users through the facilities. The reporting and worksheet facilities have been enhanced and you can now save ‘ranges’ for your reports. The animal movements module is now easier and faster to use. Also animals can be selected from an animal list screen to save you typing up individual animals.

Food safety has become an important issue in our beef industry leading to the development of CattleCare, the National Livestock Identification Scheme (NLIS) and special protocols for supply of beef to the European Union. Herd Magic 2000 provides a number of CattleCare specific reports. For example, cattle that have a treatment withholding period due to use of chemical treatments are “highlighted”.

Herd Magic 2000 is the culmination of 12 years development at Saltbush. We believe it has truly earned acknowledgment as “the gold standard in cattle herd management”. Long time user George Reed of “Narrangullen” certainly thinks so. He advised the Saltbush team, “I can honestly say that Herd Magic is the only piece of software I’ve seen that directly assists us in making more money.”

**Cash Magic**

The introduction of GST from July 1, 2000 has caused many cattle producers to take a closer look at their farm accounting software. Cash Magic has had a GST module included for over five years to meet the requirements of the New Zealand market – where Cash Magic is used. So Saltbush is off to a flying start in terms of meeting the GST requirements of the Australian market. Electronic banking is also handled together with many reports which are specific to operation of a livestock business. If you would like a demonstration copy of Cash Magic please contact the Saltbush team. Cash Magic has been fine tuned for over a decade to meet the practical needs of Australia’s farm managers. Its features are appreciated by users. For example, Sam White of the famous “Bald Blair” Angus herd reports, “One of our financial goals is to maximise production at the lowest possible cost. Cash Magic is the ideal decision-making tool to achieve that goal.”

**New Product – Stock Recorder**

Stock Recorder is a new product designed for use of individual commercial producers or groups of commercial producers in a marketing alliance. As an individual you can track the performance of your stock on farm and import carcass results into your Stock Recorder database from the abattoir. You achieve traceability and identification of superior stock. Marketing alliances can set up each farmer with Stock Recorder and also maintain a central database of all cattle in the group to permit more effective marketing of stock and benchmarking of performance of individual properties against group averages. The figure below shows how Stock Recorder meets the new requirements of farmer-led marketing of beef cattle.
Enhanced Product – FeedMania

In January, Saltbush released FeedMania for Windows – a powerful feed formulation package for farmers, nutrition consultants and feedmill operators. It allows users to optimise animal feed formulation and feed management. Enhanced for over a decade, FeedMania is a valuable management tool for any intensive livestock producer – please contact the numbers below for further information.

New Faces at Saltbush

In January 2000, Coenraad Mouton took over the prestigious role of Manager of Saltbush Software. Coenraad has formal qualifications in both accounting and computer science combined with 20 years of commercial experience in Australia and North America. He is the right person to assist Saltbush and its clients to maximise their respective and collective opportunities in the new electronic age. The new Marketing Manager of Saltbush is Tina Wright. She has graduated from Marcus Oldham Farm Management College with Distinction and has had experience working on beef cattle properties and within the live cattle exporting industry. Home is calling for Chris Pearce. In May, he will be relocating closer to his family’s beef property at Adelong. He will continue a part-time involvement with Saltbush from this new base.

Saltbush Software Contacts

A trial version of Saltbush products can be downloaded from the Saltbush home page at: http://saltbush.une.edu.au or feel free to discuss your computing requirements with the friendly support consultants on (02) 6773 3310, fax (02) 6773 3950 or email at support@saltbush.une.edu.au.

New – Feedlot Management System

A three-person ABRI team working under Steve Gapes’ direction for over a year has just completed an ultra-modern feedlot management system – with the initial installation to take place at the famous Aronui Feedlots in Dalby. The software runs under Windows NT and 98 which links PCs in various parts of the feedlot. Recognising the future importance of quality assurance, the system will track individual animals as well as lots of animals. Electronic capture of radio frequency tags (including NLIS ids) and weights are part of the system together with electronic communication with meatworks. The system also has very detailed reporting which will help custom feeders to maintain a high level of feedback with their farmer clients.

A key feature of the system is its ability to source cattle from anywhere in the feedlot to fill orders of particular market specifications. The operator can also configure their own reports to cater for “what-if” scenarios.

Aronui’s principal, Dugald Cameron, believes that the new system is a quantum-leap ahead of other software he’s seen in the feedlot industry.

For further details contact Steve Gapes at ABRI on (02) 6773 3387.
Multiple Sire Joining. DNA Testing To I/D Sire

“Gyranda” is one of Australia’s largest and oldest Santa Gertrudis studs. 1200 females are joined in the stud and commercial beef breeding herd, which is run under quite extensive conditions (1 cow/4 ha) in the Theodore area of central Qld. Multiple sire joining groups (up to 6) are the only practical system in the larger paddocks. There is then the problem of identifying sires of calves – for BREEDPLAN and other purposes. After sharing a Field Day platform with stud principal Burnett Joyce recently, I was interested to discuss how “Gyranda” is using DNA tests for sire identification.

A first step is to use unrelated sires in each mating group. This has allowed over 95% success rate in sire I/D.

Originally all samples were blood, however hair samples are now collected for the test. This of course makes it easy for storage and transport (600km) to the University of Qld. The testing is currently costing $35 per calf. “This is cheaper than the fencing, water and supervision required for single sire groups” says Burnett.

Gyranda is also collecting interesting information on the number of calves each sire gets. This may be an important way of measuring libido. Once the calves have been finger printed for sire I/D, this information is always available if they, in turn, are to be used as sires in multiple groups.

“We have also noted, with great interest, that our yield of top quality progeny from our multiple groups is equal to single sire groups (where cows are selected to suit particular sires)” concluded Burnett.

New Book On Beef Cattle Recording And Selection

Jack Allen

The Queensland Department of Primary Industries has just released a new book “Beef Cattle Recording and Selection”. Written in simple language, this book provides an overview of basic beef cattle genetics, recording of the various production traits reported in GROUP BREEDPLAN and the basic principles of planned breeding and selection in practice. Results of several producers’ experiences are included to show the benefit of BREEDPLAN Estimated Breeding Values (EBVs).

This book is an ideal companion for any modern cattle breeder who wishes to have a reference to the theory behind the practical application of BREEDPLAN. It costs $15 plus postage and is available from:

Manager, DPI Publications
Department of Primary Industries,
GPO Box 46
Brisbane

New Demonstration Farm

The Shorthorn Society has taken the progressive step of setting up its own Demonstration Farm. This is being done through its research arm, Durham R & D and in association with Meat and Livestock Australia. The property and a 350 cow BREEDPLAN-recorded stud, is being leased for 5 to 10 years from the Schwilk family. Owen and Isabel, who have for many years run the well known “Adair” stud, will stay on the property in their retirement and keep a close eye on developments. A full time farm manager will be appointed.

Facilities for workshops, field days and visiting groups will be established on the property which is near Orange, NSW. Technologies such as scanning, NLIS and DNA testing will be advanced as Junior Sires, selected by BreedObject, are progeny tested.

“Gyranda” cows and calves.
Carrying The Olympic Flame

BREEDPLAN stalwarts Arthur Rickards and Michael Hartmann have both been selected to carry the Olympic Torch on its way to Sydney. Runners are selected on the basis of their community service. Michael has been named in the top 100 young achievers in Australian agriculture by the Rural Press Group, is active in local sport, has been a Churchill Scholarship holder (in the topical study of food safety) and has made a significant contribution to BREEDPLAN support for over a decade.

For Arthur Rickards it is the second time around – he carried the torch in Queensland for the 1956 games. “The choice then was in athletic ability. Fortunately for me, they changed the criteria for year 2000!”. Even so, Arthur has been spotted sneaking off to the gym to prepare for the new challenge.

Welcome To Brad Crook

Brad has recently joined the BREEDPLAN team. He will progressively share “senior responsibilities” with Jack Allen and Steven Skinner. He is currently also handling South Devon BREEDPLAN.

For the past six years Brad has been Armidale based, lecturing and researching in the genetics area, together with some overseas consulting.

Role Of Scanning For Marbling

New research from the Beef CRC and the US, is further supporting the role of scanning to evaluate marbling in seedstock herds in BREEDPLAN.

Several Australian breeds now have intramuscular fat (IMF) or marbling EBVs largely based on this.

A major experiment in Iowa recently analysed over 20,000 yearling bull scans and correlated these with 20,000 steer relatives with abattoir carcase marble scores. There was an 80-90% genetic correlation.

The accuracy of this scanning to rank sires, is partly derived by “averaging” several progeny of each sire. Other pedigree links then further enhance accuracy.

Scanning in feedlots to draft individual steers is however very different. The accuracy is lower as only one record is available and the scanners do not work so well on very fat cattle. Nonetheless, the best scanning contractors, working with cattle in optimum condition, are achieving encouraging results in feedlots.

Scanning steers to send information to BREEDPLAN, is therefore recommended at around 60-90 days. This seems to be a ‘window of opportunity’, and may give better BREEDPLAN information than waiting for slaughter when groups may be split, and you run the gauntlet of visual marble scoring in the abattoir.

The new CRC research program includes investigations into the use of infrared technology to measure intramuscular fat, on line, in abattoirs. This could be an alternative to visual marble scoring which is notoriously difficult to standardise.

Dusty Stories

Problems for non beef eaters

A veterinarian who had recently investigated a beef residue problem in Australia told me this one: A very low trace of an insecticide had been found in some beef. It was finally traced to some sesame seeds, sold as waste from a Health Food business. The imported seeds apparently had a fair lacing of the insecticide. Much better to eat beef, at least the insecticide is safely diluted!

An allergy specialist recently told me about a genetic engineering project with soy beans. The aim was to graft in, from brazil nuts, genes for certain amino acids which would give the soy bean a more complete protein profile for vegetarians. Unfortunately, the piece of DNA involved also carried genes for something people are often allergic to (in brazil nuts). You guessed, some people eating the soy beans started experiencing the allergic reactions.

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Strange But True

Cattle in Australia are bred for all conditions, however there is one Poll Hereford cow in Western Australia that has certainly been bred to last!

Recently Philip Oxbrow, a POLL HEREFORD BREEDPLAN member, saw one of his cows having a very tough time giving birth. After eventually having the calf, she started labouring for breath. She then went quite still. Philip checked her vital signs, including touching her eyeball, gaining no response. She had stopped breathing for a couple of minutes.

As the calf looked healthy, Philip was about to go and find a bucket so that he could retrieve some of the cow’s milk, when she sprang back to life - panting like a dog! He phoned the local vet who concluded that the cow had probably suffered a heart attack. On returning to the cow with some antibiotics she was up licking the calf and going about her normal business, although trembling in her hind quarters.

A day later she was as good as gold, suffering no brain damage or other visible problems from her ordeal, and raising a beautiful healthy bull calf.

If anyone has any good suggestions for the calf’s name please contact Philip on (08) 9840 8026.

Contact List for BREEDPLAN enquiries:

Enquiries of a general nature should, if possible, be handled by your nearest beef cattle officer. For more detailed information, each Australian State has a co-ordinator, listed opposite.

Breed specific enquiries should be directed to your breed society. To reach the BREEDPLAN head office, please contact the Agricultural Business Research Institute on Phone (02) 6773 3555, Fax (02) 6772 5376.

Valuing The Haystack On A Cow’s Back

Peter Honey, Veterinarian at the Snowy River Clinic has extensive experience with herds wintering in difficult Victorian highlands. In a recent Hereford Quarterly he noted that cows can safely lose up to 150kg over 3 to 4 months. He estimates this energy store to be worth half a tonne of grain or three tonnes of silage per cow.

This ability for cows to store fat reserves is very important in many Australian production systems. In self replacing herds, too much selection for high yield % via leanness, should be approached with caution.

National Beef Recording Scheme, A.B.R.I. University of New England, Armidale 2351
Phone: (02) 6773 3555   Fax (02) 6772 5376   Email: breedplan@abri.une.edu.au.
Web address: http://breedplan.une.edu.au