Consumers have become more health conscious and are increasingly concerned about reducing intake of saturated fats, due to evidence that they tend to raise plasma cholesterol.

A research project led by John Graham from the Department of Primary Industries (DPI) found significant differences in breed variation in fatty acids of intramuscular fat and to a lesser extent subcutaneous fat. Although differences reported were small, it seems that there may be scope to utilize these genetic differences to produce meat with more desirable fatty acid characteristics. Heritability (the proportion of the variation in performance that is due to genetics and that is passed on to offspring) estimates of 0.4 have been reported for mono-unsaturated fats. The leaner, later maturing breeds appeared to have more desirable fatty acid profiles, therefore it seems that selection for “healthier” fatty acid profiles would need to be balanced with consideration of aspects of eating quality.

Further research planned for 2006 includes a sire analysis of more than one thousand progeny derived from mating Angus and Hereford cows to Angus, Hereford, Limousin and Simmental bulls. Perhaps in the future gene marker research may make it possible to identify and use beef cattle that have more desirable fatty acid profiles.

New Beef Cattle Course
“Breeders for Profit”

The Victorian DPI has developed a new two day course called “Breeders for Profit”. The objective of the course is improving the profitability of a commercial cattle breeding operation through effective and efficient cow and heifer selection”. The course includes both technical sessions and hands on exercises in the yards. During the course participants develop a Female Selection Plan for their enterprise. The course technical component covers understanding female traits and includes the use of herd performance records and female Estimated Breeding Values as selection tools. Four workshops have been scheduled in Victoria in 2006, with day one in late May and day two in early November. The workshops are designed for groups of about 15 producers and will be delivered by Bob Dent, Angus Australia, and Emma Weatherly, DPI. All beef cattle producers are welcome.

Improving Temperament

There are a number of ways that temperament can impact on beef enterprise profitability. Poor temperament can:

- Decrease meat quality
- Increase the risk of injury to both cattle and handlers
- Lower feedlot performance (growth, feed efficiency and sickness levels); and
- Increase production costs by increasing handling time and the requirement for better handling facilities.

Short-term training may change behaviour in familiar environments, however it does not change underlying temperament which will still be exhibited in unfamiliar environments; nor does it change the genes passed on to progeny.
Limousin breeders have been scoring docility since 1995. They have shown that good genetic progress can be achieved by measuring docility at weaning time and using sires with favourable EBVs for docility. Kath Donoghue of the Animal Genetics and Breeding Unit has recently calculated a heritability of 0.38 for docility in Limousin cattle.

Following a survey of members and a study of how a docility EBV has worked in the Limousin breed, the Angus Australia board has recently decided to introduce an EBV for docility.

Temperament is cheap and easy to measure. The Limousin Society strongly encourages its members to score the docility of their calves around weaning time using a crush or yard test. Angus Australia is encouraging members to submit both crush scores and ‘flight time’ measurements. Flight time is an electronic measure of the time taken for an animal to cover a short distance, about 1.6 metres, after leaving the crush. Animals with poorer temperament tend to have a lower ‘flight time’ than more docile animals.

Researcher Damien Halloway has recently completed a study scoring 494 Angus calves with four measurements for docility. His research indicates that both ‘crush score’ and ‘flight time’ observations are repeatable and correlated.

The Beef Cooperative Research Centre has established a loan system for flight time testing equipment. Equipment has recently arrived at the Department of Primary Industries (DPI) Hamilton and is available to Victorian producers to borrow at no cost except for return freight to Hamilton.

For further information or to borrow the flight time equipment contact Emma Weatherly on 0408 561 897 or emma.weatherly@dpi.vic.gov.au.

Emma Weatherly
Beef Industry Development Officer, Department of Primary Industries, Hamilton

Established NZ service culture gets the big tick

The beginning of a New Year heralded the opening of a regional office for extension staff at Meat & Wool New Zealand. Hardly surprising then that the preferred location for this was under the already successful banner of New Zealand Performance Beef Breeders Ltd. (NZPBB).

From left to right, Meat & Wool Regional and Genetics team George Walker, Liz Russell, Russell Priest, and Rex Williams co-locate to PBB in Feilding.

Four regional staff members for Meat & Wool NZ have integrated their extension activities to the Feilding premise of NZPBB providing farmers with a wide range of service delivery options.

Rex Williams of Meat & Wool’s Economic Service works with farmers to collect and analyse production and financial forecasting information. As one of Meat & Wool New Zealand’s flagship services the Economic Service has been active in this role in New Zealand for over 50 years. Liz Russell is the Regional Manager who oversees a lot of the project work currently being undertaken on-farm in the region which includes the very successful monitor farm programs where farmers learn on-farm from other farmers. Liz also works closely with the Sheep & Beef Councils.

Russell Priest, the Beef Genetics Coordinator whose primary role is to develop and disseminate beef genetic information for use by the beef industry stakeholders. Georgie Walker joins Russell in the genetics team and has a similar role in the sheep industry.

George offers support to the Senior Adviser of SIL (Sheep Improvement Ltd) and contracted extension staff in the use, and development of the SIL database and genetic evaluation system.

Meat & Wool’s Genetics Manager, Richard Wakelin says “that the decision of Meat & Wool New Zealand to co-locate its regional activities with Performance Beef Breeders was to leverage off the established service culture and extensive rural networks of NZPBB”.

Murray Meads, NZPBB General Manager commented “that the integration of 4 new team members from Meat & Wool into the culture of the company has been a welcome move. PBB’s service delivery ethic fits right along side the extension aims of Meat & Wool. Meat & Wool and PBB work on several joint venture projects together so it makes perfect sense that a lot of this can be efficiently co-ordinated from the one administration base”.

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