



Breed Improvement Articles & Updates

Ultrasound

It is non-invasive and provides an accurate and affordable means of measuring body composition and predicting carcass value.

That is why the Canadian Limousin Association is getting serious about this science.

We're committed to informing and promoting this technology to purebred cattle producers across Canada. ...it's just that important!

About the Technology

A transducer is placed on the site to be measured. Multiple high-frequency sound waves (ultrasound) are generated, which travel through the different tissues of skin, fat, muscle and bone. Each time a new tissue is encountered, an echo is then converted to an electrical signal and displayed as a dot of light on the screen. The time it takes for an echo to return to the screen indicates its position on the screen. In real-time ultrasound, images are created so quickly that a "live" image can be displayed, captured by a computer and interpreted.

Traits Measured

Three traits are measured near the 12th and 13th ribs: marbling (% intramuscular fat), fat thickness and ribeye area. A live weight measurement is also needed.

Which animals should be scanned?

Ideally, all yearling, both female and male, would be scanned at the same time their yearling records were collected.

Can live animal ultrasound be used to predict carcass measurements?

Yes, most research studies report correlations of 70% or higher between live animal ultrasound and actual carcass measurements. And, it's possible to properly rank bulls for carcass traits with even more precision, without waiting years for progeny carcass data.

Can the information be used to generate carcass EPD's?

Yes. In fact, a few breed associations in the USA, including the North American Limousin Foundation, are already using ultrasound data in their genetic evaluations.

That's what we hope to be doing soon. But first, enough data has to be collected to properly estimate genetic parameters used in the evaluations.

If you've already been scanning your cattle and would like us to include the information in our databases, please email or fax us authorization to obtain copies of your data from the ultrasound practitioners.

Why Scan?

Accurately identifying superior genetics has never been so important. The beef industry is becoming increasingly competitive - individual sectors are moving to value-based pricing in an effort to discover and reward cattle that are profit-makers. Carcass EPD's, based on ultrasound data, are a proven and effective tool for breeders to identify the best cattle, the ones that will parent the next generation of profitmakers.

Who to Contact

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