FALKIRK
QUALITY ANIMAL GENETICS

ATTENTION: **EXPLANATION**
FALKIRK SYSTEM

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Re: Falkirk Index New Zealand **Your Information**

Falkirk Index New Zealand (FINZ) has developed its Elite Lamb and Beef Systems to capture the true market expectation and directly implant it on farm, to start a clear process through production, back to market. In the short we **empower the producer** with a set of objectives, to enter breeding programmes and the market place with a set of product values that will encourage payment systems that reflect product specification and actual market worth.

The parent organisation, **Falkirk Scientific Foundation (Falkirk) is a brains trust that activates research both investigative and scientific as required, but stands aside from commercial operations**. Falkirk bases its principles on thoroughly researched knowledge bank and the understanding of systems that function and influence the agricultural sector. Falkirks personnel are professional decision-makers who have been selected as objective leaders in their chosen professions. Each representing a vital module in the complete production chain, from genetics DNA through production – market forces to business management with financial and legal skills.

It is understood by Falkirk that:-

- The interaction between market specification and product payment systems is critical
- Under the present culture, in general, we are placing mixed quality product into an environment that does not differentiate "Excellence" and therefore averaging payment systems dominate.
- The present culture is not designed to deliver clear market signals that encourage product quality.
- The area of "Best Practices" and "Production Standards" are of a high standard
- The best intentions concerning QA programmes through the production and processing network are being undermined because true financial benefits are not being delivered.
- That **product quality** is often confused in the current advisory culture with production standards, to the determent of the former.

Solution

Falkirk has researched and developed the Falkirk Index System (FIS) that defines the actual composition of an animal, accrediting the growth to bone – fat – meat ratio into an index that reflects potential **production use and market worth**. This system is commercialised and is available, under agreement to pro-active networks through FINZ

Honed on objective measurements, a data base has been forming in New Zealand since the early 90's, is in fact a ledger, of the vital statistics of production animals relating to market worth and value. It has no peer.

The Elite Lamb and Beef Programmes have been developed to encompass the complete loop from genetic assessment through processing to market placement. It incorporates the best technology on line to assess carcass and product attributes with a payment system that is value based.

FINZ is committed to assessing all sheep and beef breeds to firstly identify those strains with the ability that can more than match the requirements of the modern pundit, at a cost that is acceptable, with financial return that identifies that the industry is bankable.

The initial step towards flock or herd improvement is to carcass composition scan live animals, credit them with a Falkirk Index, then identify those with superior traits that will advantage the complete flock or herd. The data is then evaluated through a series of indices that identifies animals that fall within an **"Optimum Production Band".**

FIS classifies animals into market use and worth groupings in addition to ranking individual units of economic worth. Three broad groupings are, Elite – Standard – Sub-standard.

FIS has the ability to produce client custom required outcomes, inclusive of:

- Total flock or herd ranking
- Group, within flock or herd ranking
- Sire and Dam ranking
- Progeny ranking
- Breeder, within flock or herd ranking

The Elite System of production is all about product quality assessment of a live animal, before you start a breeding programme to avoid genetic wastage.

This system functions on the fact that there is a difference between animals. First we identify the difference then it can be rewarded and banked.

This system is not region or breed specific but empowers producers and processors to penetrate all discerning markets.

FINZ will implement its system, under contract to _____ a meat processing and marketing entity. Thus a very robust, optimal, vertically integrated production, processing and marketing system can be functioned.

In particular the FIS is directed at: -

1.1 -the breeding of livestock with superior saleable meat yield with high growth rate trait and possessing characteristics preferred by meat consumers.
-accurate grading of carcasses for quality factors, and accepted ratios of fat and saleable meat yield.
-objectively determined, differential payments schedule to pay farmers, to provide an incentive to them to produce carcasses with superior yield quality traits.
-branded marketing of qualifying meat, to capture premiums at retail point.
-upgrading of national lamb and beef producers, by provision to farmers of clear market signals of consumer preference.
-restoring viability to lamb and beef producers, by improving financial outcomes of the programme.
-ongoing promotion of branded product, to diminish the existing commodity trade paradigm of the industry.

1.2 The technology required to implement the programme has been developed by FINZ or is available to FINZ.

1.3 FINZ intends to apply its technology and policies to the following phases of the meat production cycle:
-ram and bull selection, for participating farmers, by objective measurement for desirable traits, identified by ultrasound scanning and marketing.
-commercial flock and herd evaluation to improve meat quality and yield attributes.
-progeny scanning/evaluation, to identify animals
-training of farmers, to produce and self select qualifying stock where practicable.
-accurate grading of carcasses by objective measurement, using the VIA system the Hennessy Probe or a combination of both.
-grading information fed back to farmer suppliers
-payment to farmer suppliers based on objective measurement.
-progressive enlargement of the system by:
    -ongoing refinement of technology, procedures and quality assurance standards.
    -enlistment of further farmer suppliers.

1.4 Throughout the programme there will be an uncompromising criteria for emphasis upon, and requirement for qualifying, prescribed, quality assurance standards.

2.0 **On Farm Programme for Stock Upgrading**.

2.1 Enlistment of farmer suppliers and familiarisation of them with the FIS programme.
2.2 Assess existing sires for carcass composition, using ultrasound for objective measurement, and visual assessment to ensure desirable characteristics.
2.3 Full flock and herd ultrasound assessment and report providing:
- Assessment of current flock or herd status.
- Advice on, and implementation of, individualised, tailored FINZ development programme for upgrading of each suppliers flock or herd.

2.4 Selection of replacement sires using ultrasound and visual assessment to ensure acceptable standards of conformation and muscularity.
2.5 Flock or herd mating recommendations to achieve upgrading objectives.
2.6 Training of farmers in FINZ selection criteria to achieve farmer selection capability.
2.7 Advice to farmers on disposal of non-qualifying stock.
2.8 Advice to breeders of stud sires to familiarise them with FINZ criteria, and promotion to farmer clients of stud breeders, which meet FINZ criteria.

2.9 Annual flock or herd upgrading assessment, against predetermined targets and reporting criteria, to monitor and ensure ongoing progress.

3.0 **Benefits to Farmer Suppliers and Breeders**

3.1 Efficient dry matter conversion to saleable meat, through the FINZ flock and herd upgrading programme.
3.2 Production of superior stock, processed to products capable of attracting consumer price premiums.
3.3 Higher pay outs to farmers derived from:
- Upgrading of stock quality.
- Accurate yield grading.
- Payment for yield and quality.
- Information feedback.
- Branded product promoted to consumers for its superior attributes, at premium prices.

3.4 Ongoing development of the FINZ programme.
3.5 Improved farmer profitability. (Incremental cost saving gains on farm inputs)
3.6 Improved farmer moral, to engender positive attitudes that, "at last the industry is going somewhere".
3.7 Greater farmer trust in the processor to retailer linkages of the meat processing/marketing system.
3.8 Improved accredited breeder profitability:
- Identification of desirable traits.
- Increased demand derived from improved sire quality and FINZ promotion.
- Use of FINZ technology, for objective scoring and breeding selection.
- Information feedback.

3.9 The FINZ programme is not breed specific. Qualifying stock will be drawn from a wide range of breeds.

4.0 **Benefits to Processor and Consumers.**

4.1 Consistent programmed supply of superior stock to optimise throughput.
4.2 Efficiencies from processing superior animals.
4.3 Extension of product range.
4.4 Supply and marketing of superior pelts and hides and by-products (less defects).
4.5 Staff pride and moral, from handling superior product and participation in a quality assurance programme demanding excellence and maintenance of high standards.
4.6 Spin-off quality improvements elsewhere including less staff stress.
4.7 Participation in increased revenue and profits from increased added value.
4.8 Greater commercial security.
4.9 Consistency and quality assurance to consumer clients.
4.10 Payments to farmer suppliers will be linked to a combination of:
- Objective grading for stock presented.
- Supplier loyalty.
- This payment system could be designed to ensure supplier commitment, which in turn, will provide processors with greater certainty of supply.

4.11 **Improved farmer profitability should assist in arresting the decline of sheep and beef numbers, thus assisting to under pin investment in the industry by processors**.

End