

## Ongoing Research & Development Projects

**PROJECT TITLE:** Marker assisted selection applied to commercial sheep.

**DATE OF SUBMISSION:** June 2004.

**PARTNERS:** Roslin Institute, MLC, Texel Society, Suffolk Society, Charollais Society

**FUNDING:** LINK funded, with Government funding from Defra and SEERAD, Industrial funding (cash) from EBLEX, in-kind contributions from the Texel Sheep Society, Suffolk Sire Referencing Scheme Ltd and Charollais Sires Ltd.

**INTRODUCTION:** This is a 3-year project, aimed at taking forward previous QTL results obtained for Muscle Depth in commercial Texel, Suffolk and Charollais sheep. We aim to verify these findings in 'next-generation' sheep, and enable farmers to utilise these results in their breeding programmes ('marker-assisted selection').

**FINDINGS:** After 15 months the project has been successful in recruiting enthusiastic Texel breeders into the project. Preliminary results confirm the QTL for muscle depth, and suggest that this QTL is present in more families than previously thought. We are now calculating EBV's for breeders that take account of background genetic effects as well as the QTL effect. Utilisation of these enhanced EBV's should enable breeders to make faster genetic progress. Additionally, we are currently seeking to verify QTL for nematode resistance in the same families.

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