

# Genetic Improvement of Functional Traits in Cattle GIFT

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*EU concerted Action 5Genetic Improvement of Functional Traits in cattle4(GIFT)75  
- an intermediate report*

## Functional Traits

Those characteristics of an animal which increase efficiency not by higher output of products, but by reduced costs of input; health, fertility, efficiency of feed utilization and milkability.

inspection of recording systems; longer visits for enhancement of collaborations on the development of programs/systems.

3. Internet activities: installation of a home page and making available computer programs for breeding value estimation.

## Objectives

- ~ To bring together researchers and people from the breeding organisations from member countries of the EU, and other countries with major interests in cattle production, to develop concepts for breeding of functional traits by defining breeding goals and strategies to achieve these goals.
- ~ To enhance collaborative efforts for the further development of efficient recording systems and breeding value estimation procedures.
- ~ To stimulate the exchange of existing knowledge about the genetic evaluation of functional traits.
- ~ To develop recommendations for breeding programmes for functional traits.

## Workshops

**Founding workshop Gembloux - January 1996.** The aim of this workshop was to review the state of the art in the area of breeding for functional traits in cattle. Proceedings are available as : *Groen, A.F., Soelkner, J., Strandberg, E. and Gengler, N. (Compilers), 1996. Proceedings International Workshop on Genetic Improvement of Functional Traits in cattle. INTERBULL bulletin no. 12, Uppsala, Sweden, 245 pp.*

**Health workshop Uppsala - June 1997.** The aim of this workshop was to bring forward recommendations on genetic evaluation of mastitis and feet and legs problems to be implemented in (inter)national cattle breeding programmes. Contributions to this workshop dealt with: the biological, physiological, and veterinarian interpretation of disorders and effects, from the definition to recording; the recording - existing and future recording schemes; the genetic evaluation - breeding value prediction models; ongoing and foreseen research. Proceedings are available as *INTERBULL bulletin no. 15, Uppsala, Sweden, 141 pp.*

## Activities

1. Workshops - see overleaf.
2. Short visits for exchange of computer programs,

***Fertility and reproduction workshop Grub - November 1997.*** The aim of this workshop was to bring forward recommendations on genetic evaluation of fertility and calving performance to be implemented in (inter)national cattle breeding programmes. Contributions to this workshop dealt with: the biological and physiological interpretation of fertility failures, statistical analysis of categorial traits, recording and genetic evaluation of fertility, calving performance and still birth, and the effects of new reproductive techniques on the design of breeding programmes. Proceedings will be made available as an INTERBULL bulletin.

There will be:

- ~ ***An intermediate report Warschau, Sunday 23<sup>rd</sup> August 1998*** with a *business meeting* (general report on activities, scientific reports on the Uppsala and Grub workshops) and a seminar on *Developments in dairy cattle breeding with special reference to functional traits* with invited speakers from science and industry.

Two more workshops on the definition, recording and genetic evaluation of functional traits:

- ~ ***Metabolic stress workshop - Edinburgh, october/november 1998, together with BSAS and BCVA***

- ~ ***Longevity workshop - Jouy-en-Josas, spring 1999***

and a workshop on selection for functional traits in cattle breeding programmes:

- ~ ***Final report workshop - Wageningen, autumn 1999***

### **Publication of Results**

All deliverables are accessible to the public. Activities will be announced on related Internet News Groups. In this concertation, collaboration is between educational institutes, research groups, and breeding organisations. This integrated collaboration should facilitate the dissemination of knowledge and the practical implementation of tools developed. All participants are renown institutes, each having a good national network. The partnership of INTERBULL Centre facilitates worldwide dissemination of all public deliverables.