



INTERBULLETIN

The Official Newsletter of the International Bull Evaluation Service (INTERBULL)

From the Chairman



Just three months after a very successful Interbull workshop on technical aspects of data quality and

fertility evaluations many strategic issues could be discussed during the Interbull Meeting held in Kuopio (Finland). Meeting jointly with ICAR also stimulated the exchange between developments in data recording (especially for functional traits) and genetic evaluation of these traits.

Over the years Interbull has developed a schedule with workshops, business and open meetings that give the opportunity to discuss:

- Technical aspects (well prepared by the Interbull Technical Committee);
- Strategic issues (in the Business Meeting and more recently enhanced by the Interbull Scientific Advisory Committee);
- New developments in national and international genetic evaluations (during the Open Meeting).

The large number of participants and presentations guaranties that the Interbull Steering Committee gets the necessary input to take well-balanced decisions for a positive development of Interbull. Interbull wants to intensify the discussion with the end users in herd books and AI organisations and will organise a meeting in 2007 to increase understanding of the industry needs and to emphasize the advantages of proper use of Interbull evaluation results.

The increasing amount of routine evaluations at the Interbull Centre has resulted in a

shortage of personnel and time for research and development (R&D). A membership questionnaire clearly showed that an increase in service fees would not be acceptable. Additionally, many countries indicated the desire to reduce the number of routine evaluations on national level. Therefore, a reduction of routine international evaluations was an option to allow for more R&D work at the current level of fees. Consensus about a new evaluation schedule was reached after many discussions before and during the meeting in Kuopio, and this process showed the positive spirit within the Interbull community to agree on a compromise.

Another strategically important topic was the expansion of Interbull service to beef traits. This service will be jointly developed by Interbull, ICAR and INRA during a three-year period. The challenge is that this service will use phenotypic data as input rather than bull breeding values that are currently used in the Interbull MACE evaluations for dairy cattle.

At the end of the meeting it was time to say good bye to Jean-Claude Mocquot. Jean-Claude has been excellent in 'steering' Interbull in times with many challenges and he deserves a lot of credit for the expansion of Interbull services during the past years. It is now time to consolidate the services in order to maintain the good credibility of Interbull services with very sound quality.

Reinhard Reents

Successful Interbull Meeting in Finland

This year's Interbull Open Meeting took place in Kuopio, Finland, 4-6 June, 2006 in conjunction with the biennial ICAR Session. There were 150 participants from 34 coun-

tries. The scientific program focused on methods for international genetic evaluation, female fertility, new indicator traits and computational aspects of genetic evaluation. Thirty-seven contributions were presented.

At the Business Meeting several important issues were discussed, amongst others:

- Nomination of a new chairman and members of the Steering Committee (SC);
- Expansion of the international genetic evaluation service to include female fertility;
- Launch of a project to develop beef international genetic evaluations;
- Change of frequency and timing of Interbull evaluations;
- Adoption of a new name for the Ayrshire breed group;
- Principles for publication of Interbull evaluation results at national level;
- Start of a study on international evaluations for milking speed and temperament.

An executive summary of the Business meeting is available on the web-site of Interbull.

Changes in Steering Committee

The chairman of the Interbull Steering Committee (SC), **Jean-Claude Mocquot**, announced last year his retirement as SC member. Jean-Claude retired after serving as SC member since the establishment of the Interbull committee in 1983 and as chairman for the past six years. Jean-Claude was duly congratulated at the Interbull Business Meeting in Kuopio for his instrumental work to develop the Interbull activities to be truly international and broad-reaching.

The chairmanship club was handed over to **Reinhard Reents**, SC member since several years. Reinhard is employed by VIT (Vereinigte Informationssysteme Tierhaltung) in Verden (Germany) as general manager.

Sophie Mattalia from Institut de l'Élevage (France) was nominated for a four-year period (2006-2010) and replaces Jean-Claude

Mocquot. Sophie has a long experience in national and international genetic evaluations and we welcome Sophie as SC member.

Hans Wilmink is the chairman of the Interbull Technical Committee and he has already a longstanding record as SC member. Hans was nominated for a new four-year period.

Interbull Centre staff

Flavio Forabosco started at the Interbull Centre in November 2005. His main responsibilities are delivering Interbull services and customer communication. In addition, he will be involved in the research and development of international genetic evaluation. Flavio completed his PhD at the Wageningen University in the Netherlands while he was employed by the National Association of Italian Cattle Breeders. His main responsibility there was to conduct genetic evaluations for five Italian beef breeds.

Maria del Pilar Schneider will work at the Interbull Centre for six months. Pilar will be investigating estimation of genetic correlations between countries using factor analysis approaches. Pilar completed a PhD thesis entitled "Fertility, mastitis and longevity in dairy cattle analyzed using survival models" in June 2006.

Houcine Othmane from the Department of Animal Production of INRA (Tunisia) stayed at the Interbull Centre between August 2005 and January 2006. He worked on a project to develop a test-day genetic evaluation model for milk production traits for Tunisian Holsteins.

Caroline Gustafsson, an MSc student at SLU University, worked on her Master's thesis at the Interbull Centre between August 2005 and March 2006. The aim of her thesis was to describe population structures and breeding programs for all of the six breeds that are considered in the international evaluations undertaken by Interbull.

Data quality and Fertility in Focus

A two-day technical workshop was held in Wageningen, The Netherlands, March 1-4, 2006. The main purpose of the workshop was to exchange experiences on female fertility and data quality. Discussions on female fertility were also targeted towards launch of the international genetic evaluation service for this trait group. Discussions on data quality were to a great extent related to national checks on data sent to Interbull, and Interbull checks on national data. The importance of high quality data was emphasized, and as a result **improved data verification tools have been implemented** at national and international level.

Interbull Evaluations are Valuable!

Four independent studies concluded recently that Interbull evaluations based on foreign daughters were accurate predictors of future domestic evaluations. Interbull evaluations proved to be much **better than parent averages or home-country breeding values**. The trait groups under investigation were production, conformation and udder health. Details of these studies can be found in the proceedings of Interbull meetings, published as Interbull bulletins and available on the web-site of Interbull.

May 2006 Interbull Evaluation

Numbers of bull populations participating in international genetic evaluation in May 2006 are in Table 1.

Table 1. No. of bull populations for international genetic evaluations in May 2006 routine run.

Breed	Production	Conformation	Udder health	Longevity	Calving
AYS ⁽¹⁾	10	8	12	8	5
BSW	9	7	7	6	-
GUE	6	4	5	4	-
HOL ⁽¹⁾	24	19	25	18	12
JER ⁽¹⁾	10	9	8	6	-
SIM	10	-	8	2	-
Total	69	47	65	44	17

⁽¹⁾ Denmark, Finland and Sweden participate with Ayrshire, Holstein and Jersey data from a joint evaluation for production and conformation.

New service: Female Fertility

Several years of intensive R&D work presented to Interbull members in Uppsala, Wageningen and Kuopio paved the way for international evaluations for female fertility traits. During the Kuopio meeting the SC decided to offer this new service comprising five traits that reflect: ability to conceive (maiden heifers and lactating cows), ability to start cycling (lactating cows) and interval calving-conception. The first test evaluation for Holstein is scheduled for **September 2006**. At the same time a pilot study for the other breeds is scheduled. Traits considered for international evaluation may change as recording and genetic evaluation of this biologically complex trait evolves.

Survey for Milking Speed and Temperament

A membership survey held in December 2005 revealed that 16 and 14 countries have recording and genetic evaluation for milking speed and temperament, respectively. Almost all these countries were interested in international genetic evaluations for both traits. A **pilot study** to investigating the feasibility of such international evaluations will be coordinated by the Italian Brown Swiss breeders Association and starts in 2006.

New Evaluation Schedule

A survey on frequency and timing of evaluations was conducted among member countries in December 2005. After a thorough discussion of the responses at the Business Meeting in Kuopio the SC decided to:

- 1) **Reduce the number of routine evaluations** to three per year, and keep the number of test evaluations at two per year;
- 2) Officially release evaluation results on the first Tuesday after January 11 (assuming delivery of national evaluation results early December), the first Tuesday in April and the third Tuesday in August;
- 3) Start test evaluations three weeks after the release of April and August routine evaluations;

4) Put the new schedule into effect after the September 2007 test evaluation. The detailed evaluation schedules for 2006-2008 are on the web-site of Interbull.

Name Change

The name of the Interbull evaluation for the Ayrshire breed group will change to **Red Dairy Cattle breeds (RDC)**. Motivation for this change is to better reflect the genetic background of the populations included in this evaluation, that comprise several red dairy cattle populations and few Ayrshire type populations. This change will be in effect from the test evaluation of September 2006.

Interbull Session at 8th WCGALP

In 2006, Interbull will be sponsoring the session on dairy cattle and buffalo breeding at the 8th World Congress of genetics Applied to Livestock Production (WCGALP). Three invited speakers will address the use of data from on-farm automatic recording systems, new traits in dairy cattle breeding and managing crossbreeding and inbreeding. Besides these invited papers, **90 contributed papers** were submitted for this session. The session sponsored by Interbull is organized by Georgios Banos (Greece; convener of the Interbull Scientific Advisory Committee). Further information about the congress can be found at <http://www.wcgalp8.org.br>.

Meeting – Industry Partners, 2007

For a long time there has been an interest for a meeting between different industry partners (AI organizations, world breed societies and herd books) and Interbull. Such a meeting has now been scheduled to take place **in conjunction with the World Dairy Expo** in Madison October 2-6, 2007. The main purpose of the meeting is to get a closer dialogue between the industry and Interbull.

Expansion to Beef

ICAR decided at its biennial session in Kuopio to **contribute for a period of three**

years to the development of a beef international genetic evaluation service. In addition, INRA in France has allocated a person to work on this project. Member countries lead by France and Ireland had previously made resources available for the project to allow its start and employment of yet another person for three years at the Interbull Centre to proceed with the development of this service.

Future Events

August 13 – 18 2006	8 th WCGALP in Belo Horizonte, Brazil
August 23-29 2007	58 th EAAP and Interbull annual meetings in Dublin, Ireland
October 2-6 2007	Industry meeting in conjunction with the World Dairy Expo in Madison, USA
June 2008	ICAR and Interbull meeting in USA

Contacts

Interbull Centre, P.O. Box 7023
SE-75007 Uppsala, Sweden
Fax: +46 18 672648

E-mail: interbull@hgen.slu.se

<http://www.interbull.org>

Interbull Steering Committee:

- Reinhard Reents (Chairman), Germany
- Gert Pedersen Aamand, Denmark
- Dorota Krencik, Poland
- Bill Montgomerie, New Zealand
- Sophie Mattalia, France
- Enrico Santus, Italy
- Brian Van Doormaal, Canada
- Paul VanRaden, USA
- Hans Wilmink, The Netherlands
- Jan Philipsson (Interbull Secretary), Sweden

see <http://www.interbull.org> | Steering Committee for complete contact details