



A word from the President

1.0 A Word from the President

On 12 September my wife Hermine and I finished our 90-day hike from Holland to Rome. It was an exciting experience. Walking across Europe is beautiful: the different landscapes in Germany; the mountains and small-scale animal farms in Switzerland; the marvellous villages, cities and cathedrals in Italy; meeting different people.

Walking is slow travelling. It brings you closer to people and to the area you are in. brings you closer to the essence of life. Hermine and I are very happy that we were able to make this journey and we are very grateful to all colleagues, fellow Board members, family, friends and our children for the opportunity.

During my leave, the ICAR Board, under the chairmanship of Jay Mattison, our Vice President, and with Martin Burke leading the ICAR Executive Team, successfully carried out our programmes and activities.

In this issue of the ICAR Newsletter you'll read the salient points and the subsequent results of the Krakow Technical Workshop. Other highlights are the organisation of the Interbull Annual Meeting, the approval of new procedures for testing and certification of ID devices, the establishment of the Implementation Task Force for GENOEX, new programmes in the field of milk analysis, feed and gas recording as a new field of ICAR activity and well-advanced preparations for our 2016 Annual Meeting in Puerto Varas, Chile.

I would like to take this opportunity to extend to our members and their staff and to all professionals involved in ICAR – participants in our sessions and technical workshops, members of ICAR sub-committees and working groups, the ICAR Board and the ICAR Executive Team – Season's Greetings and my best wishes for a healthy and prosperous 2016.



Hans Wilmink during the designing of the future ICAR strategy.

2.0 Changes to ICAR Guidelines

The ICAR Board approved changes in the ICAR Guidelines as proposed by the Conformation Recording Working Group, Functional Traits Working Group and Parentage Recording Working Group. Any comments and proposals by ICAR members on the draft changes were taken on board and the new guidelines will now be placed on the ICAR website.



TABLE OF CONTENT

A Word from the President 1

Changes to ICAR Guidelines ... 1

Activities of the ICAR Board 2

Implementation Task Force of the Genotype Exchange Parentage SNP Exchange (GENOEX-PSE) Service..... 2

Certificate of Quality 2

Revision of rules of the ICAR Certificate of Quality (CoQ). 3

Communication with Chairs of Sub-Committees and Working Groups..... 3

Interbull Sub-Committee 3

Milk Analysis Sub-Committee (MA SC) 4

Recording and Sampling Devices Sub-Committee (RSD SC)..... 5

Animal Identification Sub-Committee (ID SC) 5

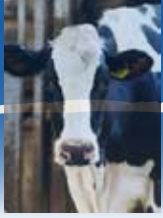
Dairy Cattle Milk-Recording Working Group (DCMR WG). 6

Feed and Gas Working Group 7

New ICAR members 8

International cooperation 9

40th ICAR Biennial Session in Puerto Varas (Chile) on 24-28 October 2016 10



ICAR Board

3.0 Activities of the ICAR Board

The ICAR Board at its four teleconference and one face-to-face meetings reviewed the outcome of the Krakow workshop, the current activities of the ICAR bodies, the financial position of the organisation, and the activities of Service-ICAR Srl. New ICAR members and associate members were approved and new programmes and activities were developed, including the updating and restructuring of the ICAR website and measures and actions to strengthen the ICAR brand.

GENOEX-PSE

4.0 Implementation Task Force of the Genotype Exchange Parentage SNP Exchange (GENOEX-PSE) Service

Organisations in charge of parentage verification have been successfully exchanging ways to verify parentage for decades. However, the exchange of material internationally, whether through microsatellite results or blood types, has been manual and bilateral, requiring constant interaction with foreign counterparts and manual handling. For decades these organisations have been adopting new technologies, including the recent adoption of Single Nucleotide Polymorphisms (SNPs) technology, and there are now new opportunities to streamline and automate the exchange of SNPs useful for parentage verification.

The goal of ICAR and its Interbull Sub-Committee and Interbeef Working Group, is to facilitate and streamline the work of organisations in charge of parentage verification by sanctioning the establishment of a database for the storage and exchange of SNP data at the Interbull Centre. To accomplish this, an International Genotype Exchange Platform (GENOEX) Parentage SNP Exchange Service (PSE) – GENOEX-PSE –database has been established at the Interbull Centre.

The ICAR Board formed the Implementation Task Force (PSE-ITF) to provide the Interbull Centre with policy and expert guidance during the implementation of the GENOEX-PSE service and to ensure that Expert Group advice is sought and considered during the implementation of the service. The Task Force will also ensure the GENOEX-PSE service meets or exceeds the expectations of service users. Members of the PSE-ITF are:

1. Sophie Mattalia, Interbull Steering Committee member.
2. Suzanne Harding, Chair of the ICAR Parentage Recording Working Group.
3. Wim van Haeringen, Chair of the ICAR Genetic Analysis Working Group.
4. Matthew Shaffer, Chair of the ICAR Breed Associations Working Group.
5. Andrew Cromie, Chair of the ICAR Interbeef Working Group.

Convener of the PSE-ITF is Toine Roozen, Director of the Interbull Centre. Brian van Doormaal, member of the Interbull Steering Committee, has been nominated as Secretary of the PSE-ITF.

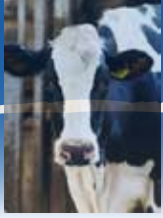
CoQ

5.0 Certificate of Quality

The ICAR Board accorded the Certificate of Quality to:

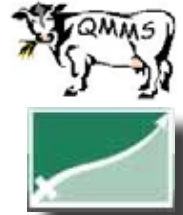
- United Dairy Farmers Ltd, Belfast, Northern Ireland, for identification and production recording of dairy cattle





CoQ revision

- Quality Milk Management Service, Easton Wells, Somerset, United Kingdom, for production recording of dairy cows
- The Breeding Service of the Slovak Republic for identification and production recording of dairy sheep, milk laboratory analysis, and data processing.



Revision of rules of the ICAR Certificate of Quality (CoQ)

On the basis of recommendations made by a special Focus Group, the ICAR Board at its meeting of 20 November 2015 agreed to extend the inter-audit period from three to five years and that the non-visit audits be replaced by a Consultative Review. Experience has shown that in a three-year period there are generally no significant changes in the practices of ICAR members. The new procedure will also reduce the total costs of audits while preserving the relevance of the CoQ service by introducing consultative reviews. The ICAR Secretariat will prepare a new standard procedure and distribute it to ICAR members.



News from SCs and WGs

6.0 Communication with Chairs of Sub-Committees and Working Groups

As part of ongoing efforts aimed at improved communications between the ICAR technical bodies and the ICAR office, Martin Burke, CE, and Brian Wickham, Coordinator, held calls with chairs of sub-committees and working groups. These calls served to ensure that the functioning and activity level of the group is progressing in the right direction with no duplications. The ICAR office obtained additional information of the groups' needs so as to continue to support the groups centrally. Each group also had an opportunity to discuss the relevance of the Accuracy Task Force Report to their own activities.

Interbull SCI

Annual Meeting

6.1 Communications from the Interbull Sub-Committee

2015 Interbull Annual Meeting

The 2015 Interbull Annual Meeting (9-12 July 2015) was held in conjunction with the Joint Annual Meeting (JAM) of ADSA-ASAS in Orlando, Florida, USA.

During the Interbull Open Meetings the following topics were discussed:

- Developments in (inter)national genetic and genomic evaluation methods
- Developments in (inter)national breeding objectives and structure
- New traits/models in national genetic evaluations.

Proceedings and PowerPoint presentations of the open meetings are available through the 49th Interbull Bulletin (<https://journal.interbull.org/index.php/ib/issue/archive>) and the Interbull Centre website (www.interbull.org/ib/orlando_presentations) respectively. Additionally, two joint Interbull/JAM sessions – on 1) "Milk spectral data – Cost-effective information to improve expensive and limited traits in dairy cattle breeding" and 2) "Use of genomics to improve limited and novel phenotypes in animal breeding", were well received by more than 150 attendees.

The Interbull Centre Activity Report was presented during the business meetings to the approximately 90 attendees. You may download this and previous annual



GENOEX-PSE TF

reports (www.interbull.org/ib/itbcreports) for details on personnel, finances, budgets, activities and plans.

Findings of the GENOEX-PSE Business Rules Task Force

The findings of the GENOEX-PSE Business Rules Task Force were also presented at a business meeting in Orlando. Following this presentation, the efforts to establish a GENOEX-PSE service and database at the Interbull Centre will continue through the GENOEX-PSE Implementation Task Force, which was appointed during the ICAR Board Meeting of 20 October 2015. The Task Force members (listed above) will provide updates at future ICAR and Interbull meetings (notably the meetings in May and October 2016) with administrative support from Elena Couto. This Task Force has a wide representation from the genomics field than is covered by ICAR.



Steering Committee

Interbull Steering Committee Composition

The following Interbull Steering Committee members were proposed by the Interbull Business meeting (and subsequently approved by the ICAR Board meeting on 18 August 2015):

1. New term of four years for Gert Pedersen Aamand
2. New term of four years for Reinhard Reents and also to continue as Chairman of the Interbull SC for another period
3. New term of four years for Marco Winters (UK), replacing Andrew Cromie (IRE).

Reinhard Reents confirmation

Reinhard Reents re-elected as President of the Interbull Sub-Committee

The ICAR Board endorsed the decision made at the Interbull business meeting in Orlando (Florida, USA) to nominate Reinhard Reents as President for four years and Gert Pedersen Aamand and Marco Winters for four-year terms as members of the Interbull Steering Committee.

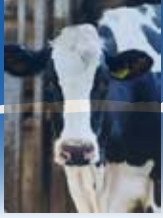


Milk Analysis SC

6.2 Programmes and activities of the Milk Analysis Sub-Committee (MA SC)

The Milk Analysis Sub-Committee chaired by Gavin Scott (NZ) has new members since the last meeting in Namur in April 2015. The new members are from England, Poland, Belgium, Germany, France, South Africa and Argentina, and take the committee to a total of 12 participants. Since September the MA SC has been supported by previous member Silvia Orlandini from ICAR Secretariat. She will collaborate with the MA SC to globally expand ICAR Proficiency Testing (PT) in accordance with the MA SC's decision to open the ICAR PT to laboratories that performed dairy herd improvement analyses. The MA SC is preparing a workshop at the biennial ICAR session in Chile, where the latest MA SC outputs will be presented. The main presentations will be the news on the Reference System for Somatic Cell





Recording Devices SC

Goals

6.3 Communications from the Recording and Sampling Devices Sub-Committee (RSD SC)

Goals of the RSD SC

The goals of the sub-committee include the development and maintenance of relevant technical guidelines and standards for recording and sampling devices. It will focus on communication between member organisations, recording device manufacturers, test centres, and other parties of interest and deliver clear and consistent procedures, messages, and guidelines. It will work in an efficient and fair manner with consideration to both internal stakeholders and external interested parties and continually review and evaluate industry needs and expand focus area(s) to include new technologies and devices as appropriate.



Key issues

Key issues addressed by the Sub-Committee

The sub-committee is developing guidelines for body condition scoring devices and guidelines for tissue sampling devices. It will pay particular attention to the length of approval on recording and sampling devices and engagement from recording device manufacturers. It will develop new ICAR test applications and submittal forms and update the ICAR website with certified devices. Issues addressed by the sub-committee include also testing of uncertified combinations of AMS and shuttle sampling devices, review and action on feedback from member organisations, and revision of certain portions of Section 11 of the ICAR Guidelines.

New members

New members of the Sub-Committee

Hubert Rothfuss (MKV Elbe-Weser, Germany), Justin Frankfort (NMR, United Kingdom) and Snorri Sigurdsson (SEGES, Denmark) are new members of the RSD SC.



Snorri Sigurdsson, new member of the Recording and Sampling Devices Sub-Committee

Acknowledgments to to Manfred Hammel

Thank you to Manfred Hammel

The ICAR Executive Team joins the RSD SC in expressing appreciation to Manfred Hammel (LKV Brandenburg e.V., Germany) for his many years of service to the Recording and Sampling Devices Sub-Committee.

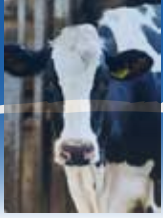
Animal Identification SC

Permanent ID

6.4 Activities of the Animal Identification Sub-Committee (ID SC)

Projecting the permanence in permanent animal identification

This year has been an exciting year for the ICAR Sub-Committee for Animal Identification with the release of the new ICAR testing procedure for evaluating the composition and environmental performance of external Radio Frequency



Identification (RFID) devices. This procedure has been designed specifically to assist competent authorities in the selection process of RFID devices appropriate for their needs and to also assist manufacturers in forward projections of their products' respective performances in a real-world environment.

The Composition and Environmental Performance Testing Protocol measures the following characteristics:

1. Electronic readability of the device through all phases of the testing procedure.
2. Tamper-proof characteristics of the device.
3. Resistance of the device's locking mechanism.
4. Analysis of the plastic raw material, including thermal characteristics, to create a device "fingerprint".
5. Potential harmful substances within the plastic composition of the device.
6. Resistance to artificial aging, i.e. UV stability.
7. Resistance to tensile loading.
8. Resistance to the impact of a free fall.
9. Resistance to cold.
10. Resistance to dry heat.
11. Resistance to damp heat and cold.
12. Typography readability for the relevant device type.

Competent Authorities are encouraged to liaise with supplying manufacturers in the utilisation of this ICAR testing protocol. The Composition and Environmental Performance Testing Protocol can be found in Section 10.8 of the ICAR Guidelines.

New certification procedure

The new testing and certification procedure begins 1 January 2016

As decided in the June 2015 meeting of the ICAR Sub-Committee for Animal Identification, a new procedure has been developed and made available for testing and certification of modified permanent ID devices based on a Device Change Notification (DCN).

The new DCN procedure replaces the cancelled "Family Test" procedure and is described in detail within the ICAR Guidelines 2014, paragraphs 10.7.5.1 and 10.8.5.1, and the related annex application forms. You will also find a full procedure description in the "Highlights" box located on the ICAR home page: www.icar.org.

The new procedure will be available for applications from 1 January 2016 and ICAR/SERVICE-ICAR Srl encourages manufacturers to make good use of this procedure.

The ICAR/SERVICE-ICAR Srl Secretariat will be pleased to answer any queries you may have.

Dairy Cattle Milk-Recording WG

Meeting

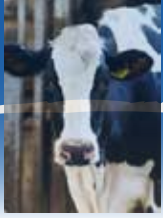
6.5 Activities of the Dairy Cattle Milk-Recording Working Group (DCMR WG)

Meeting of the working group

The Dairy Cattle Milk-Recording Working Group held a meeting at the ICAR Secretariat on 16 and 17 November. The meeting focused on major revisions to the ICAR Guidelines Section 2. This work is in the latter phases of preparation and a current draft is being discussed with external



Some of the participants of the meeting of the DCMR WG, held in Rome



Lactation

reviewers. The next phase will be to focus on discussions with the relevant ICAR working groups and sub-committees.

Evaluation of lactation

The working group also discussed policies with regard to the evaluation of lactation and 24-hour calculation methods. Many methods used by ICAR members are very often modifications and/or adaptations of current methods in the ICAR Guidelines. Our future approach will be to fully describe in the ICAR Guidelines new and innovative methods only. Adaptation and/or modification of current methods described in the ICAR Guidelines will be included in the appendix, with a bibliography at the end of Section 2. However, they will not be described in detail in ICAR Guidelines Section 2.

Trends in milk recording

Worldwide trends in cattle milk recording

Another point for discussion was our book based on the survey "Worldwide Trends in Cattle Milk Recording". Three papers were presented in Poland. The book should cover all questions in the survey as well as some derived indicators, and be helpful for routine milk-recording practice within ICAR member countries. It will cover the most important processes, from sample-taking to delivery to the laboratory, including lactation and 24-hour calculations, quality management and other relevant details. The first draft will be available at the end of January.

Projects

Future projects

Future projects and papers for ICAR 2016 in Chile and ICAR 2017 in Scotland include the following: New Technologies – In-line Analysis; Management of Milk-Recording Organisations – Current Problems and Future Challenges; Milk-Recording Guidelines 2016 – New Standards For a New Era; Quality Management Systems for Dairy Farming – Opportunities and Difficulties for Recording Organisations; Milk-Recording Reform in Finland – Was it Worth it?; South American Project; Factors in Chile; and Statistical Analysis Relevant to the ICAR Guidelines. Future discussion will centre on plausibility checks, connections between milk-recording data and health traits, in-line analysis and sensors, daily milk-recording data from Israel, AfLab data and lactation and 24-hour calculations – future directions. We have placed much emphasis on defining our future strategies and our vision for the group.

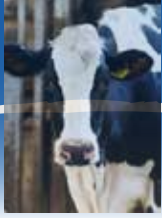
Feed and Gas WG

6.6 Feed and Gas Working Group

The ICAR Board established the Feed and Gas Working Group as a forum for members of ICAR and associated researchers to collaborate, exchange information and learn from each other on all aspects of recording and using dry matter intake data, and recording and using methane outputs data.

The working group will maintain, update, promote and extend universal guidelines for recording dry matter intake and methane output in cattle, sheep and goats worldwide. It will conduct and report the results of periodic international surveys on recording dry matter intake and methane output and develop, provide and promote a system and standards for data storage and genetic evaluation services, which will form the basis of services that ICAR will provide to members of ICAR and their research associates on a user-pays basis. The F&G-WG will be governed by a committee appointed by the ICAR Board. The committee may, from time to time, create advisory committees to provide specialist and expert advice on topics of relevance to achieving the objectives of the group.

Roel Verkamp was appointed by the ICAR Board to chair the Feed and Gas Working Group.



New Members

Full Members

7.0 New ICAR members

7.1 New full members

Sheep and Goat Breeders Central Association of Turkey

Activities of the Sheep and Goat Breeders Central Association of Turkey established in 2011 include the development of the national breeding programme for sheep and goats, herd bookkeeping and consultancy services for its members. It operates in 80 provinces of Turkey.



Sistema Nacional Informacion Ganadera SNIG, Uruguay

The ICAR Board at its meeting of 20 October 2015 endorsed the full membership of the Sistema Nacional Información Ganadera (SNIG), a department of the Ministry of Agriculture of Uruguay.



Associate Members

7.2 New associate members

BIXS Co Canada

The Beef InfoXchange System (BIXS) is a Canadian national, voluntary, web-based application that enables the storage and exchange of data linked to an individual animal's RFID tag registered with the Canadian Cattlemen's Identification Agency (CCIA). Ultimately, BIXS will enable every consumer to know the source of their beef products; every cow/calf producer to learn how well their breeding programmes are working at the feedlot; packer and retail levels; and will allow participants to build business relationships.



Intelligent Systems of Business Control Ltd (ISBC) Russia

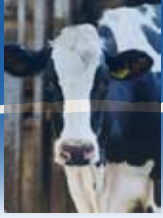
ISBC is a leading distributor of RFID equipment for animal identification in the Russian Federation and CIS countries, importing, arranging electronic and laser personalisation in its production facility in Zelenograd, Russia. ISBC represents such brands as Datamars, Gallagher and BioControl. Additionally, ISBC works closely with systems integrators of software for animal identification and data management on farms and carries out education and training in Russia in relation with tagging and identification processes.



DigiDelta Portugal

DigiDelta Portugal is an ICT company that specialises in the printing of animal identification and traceability systems with over 25 years' experience in this field.





Cooperation

BOARDING

EFFAB

Meetings

Shearwell Data Ltd, UK

Shearwell Data Limited supplies livestock identification and management systems – software, visual and RFID tags and readers – to consumers in the UK, Australia, Brazil and New Zealand.



8.0 International cooperation

Project BOARDING

The ICAR Board agreed with the proposal made by the Animal Data Exchange Working Group to support Project BOARDING, which is aimed at building a network of existing and planned smart farming research infrastructures in the Baltic Sea Region to enhance digitalisation in agriculture, especially adoption of smart farming practices. The BOARDING network will establish a fluent data exchange between the infrastructures, enabling agricultural innovators, especially research and SMEs, to access efficiently agricultural data originating from diverse environments. The Board requested Erik Rehben (Chair of the working group) to engage on behalf of ICAR as the working group is looking for pilot projects to test their new data exchange protocols. This is considered an opportunity for the Animal Data Exchange WG to develop a new service for SERVICE-ICAR Srl. in the field of data exchange.

Patent search – agreement with EFFAB

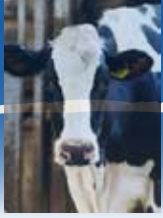
ICAR surveyed its members in May regarding patent search needs/demands, with no resultant demands or value add/requirements from ICAR. In view of the fact that EFFAB – European Forum for Farm Animal Breeders – has established a patent search and monitoring service, the ICAR Board has agreed to refer all member patent requests to EFFAB.

International meetings of interest for ICAR

International Goat Association (IGA)

The International Goat Association (IGA) is organising the 12th International Conference on Goats, ICG 2016, which will take place on 25-30 September 2016 in Antalya, Turkey. The theme of the conference is "Contributions of caprine agrosylvopastoral production systems to society and the environment: different strategies for developing goat value chains to face global change". More details are on www.iga-goatworld.com.





40th ICAR Biennial Session in Puerto Varas (Chile) on 24-28 October 2016

The 40th Biennial Session of ICAR will be held 24-28 October 2016 in Puerto Varas, Chile. For more information, see www.icar2016.cl/



On behalf of the ICAR team, its Sub Committees and Working Groups, we wish all our Members and the wider ICAR community a very happy and peaceful holiday season and a very prosperous 2016.

Yours in Recording, Martin Burke, ICAR, CE