

March 2016

A word from the President

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1. A word from the President

The publication of this newsletter coincides with ICAR's 65th anniversary. ICAR was formed in Rome on 9 March 1951 with the original scope to harmonise milk recording and calculation procedures and to formulate results in support of livestock selection and the growing trade in genetic material. This edition's content illustrates the development of ICAR from a small regional technical organisation to a preeminent international guideline reference for animal identification, recording systems, data analysis and evaluation.

I would like to draw your attention to two specific events among the activities of our governing and technical bodies throughout December 2015– February 2016 that demonstrate ICAR's basic policy orientation i.e. to provide services for all regions and production systems. These events are:

• the establishment of the Global Reach WG, showing the direction in which ICAR is responding to the requirements of various production systems



The ICAR President, Hans Wilmink, designing the "Future ICAR" and the necessary actions to reinforce the ICAR's role as leading organisation in the animal production sector.

 the nomination of the Expert Group as a measure aimed at strengthening the GENOEX-PSE service.

Preparations for the 40th ICAR Biennial Session in Puerto Varas, Chile, are advancing according to plan. Online registration opened in mid-February. For more information visit www.icar2016.cl.

Congratulations to the Interbull Centre on behalf of the whole ICAR family for obtaining ISO 9001 certification.

2. ICAR's 65th anniversary: the marking dates

- 1936, Rome, Italy signature of the International Convention for the Unification of Methods of Maintaining and Functions of Herd Books
- 23-25 April 1947, Rome, Italy FAO convened the meeting of European livestock experts to review the implementation of the Convention. Experts considered that the Convention did not respond to requirements of the increasing international trade in genetic material and agreed on the need for the harmonisation of methods of milk recording.
- 16-18 December 1947, Rome, Italy the Commission of Experts produced a draft international agreement on unification of recording methods on

the basis of a survey of methods of milk and butterfat recording prepared by FAO.

- 31 October 3 November 1949, Paris, France – the Commission of Experts proposed the establishment of the European Committee for Milk and Butterfat Recording, whose task would be to monitor the implementation of the international agreement on milk and butterfat recording.
- March 1950, Geneva, Switzerland – the FAO Committee on Agriculture reviewed the state of milk recording and supported proposals made by the Commission of Experts. It requested that the FAO convened a meeting of national representatives

FA0 51.3/1146f Agr. ORGANISATION DES NATIONS UNIES POUR L'ALIMENTATION ET L'AGRICULTURE

REUNION DES REPRESENTANTS DES ORGANISATIONS DE CONTRÔLE LAITIER-BEURRIER Rome, 5-9 mars 1951

RAPPORT FINAL

Inclusion La réanion des Experts européens en production animale convoquée par la PAG a réanion des Experts européens en production animale convoquée par la Douve a la 25-25 avril 1547 étudis les résultats othenus jusqu'alors par la Douve b divese généalogiques du bétail, signés à Nomes d'animaur reproducteurs, la par de la texte original de la Convention de divinet d'un intérêt princerdial par la par de texte original de la Convention de la fonde de la convention de la secondaria plus entre d'animat. Esta constituint de la convention no répondation plus entre d'un par la esta de la convention de la conve que

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The document that originated ICAR in 1951

to propose the official approval of an international agreement on milk recording and the establishment of the European Committee for Milk Recording.

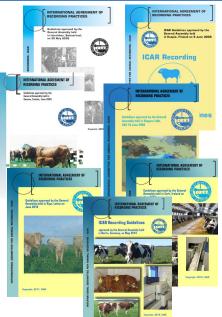
Introduction

5-9 March 1951, Rome, Italy – representatives of national FAO committees and milk recording institutions approved the International Agreement and decided to establish the European Committee for Milk and Butterfat Recordina.

Why ICAR

3. ICAR: the founding reasons

A six-page document approved by representatives of milk recording institutions from several European countries on 9 March 1951 represents the first ICAR guidelines on animal recording. It deals with cow milk recording and contains eight chapters: basic principles; organisation of recording; methods of recording (methods A and B), including measurement of the fat content (methods Gerber, Babcook, Hoyberg, Leroy and Lindstrom were mentioned); duration of recording whole lactation or 365 days (305 and 330 days were also permitted); methods of calculation; registration of data; and publication of results. The last chapter deals with the establishment and functions of the European Committee for Milk and Butterfat Recording. The original document is stored in the FAO archives.



The covers of the ICAR Guidelines through the years (2002-1014).



The Board

Global Reach

4. ICAR Board Activities

4.1. The Global Reach Working Group

The ICAR Board has approved the establishment of the new Global Reach WG and ratified its Terms of Reference. The Group's mission is to "bring the benefits of ICAR to the rest of the world". It is expected that this decentralised structure would contribute to the mobilisation of local expertise and to the establishment of cooperative initiatives for the development of recording and evaluation guidelines

and practices that are based on the specificity of local production systems.

The Global Reach initiative will replace the former Developing Countries WG and will consist of a number of sub-groups and a central coordinating team. The sub-groups will comprise people living and working within territories where it is felt that the 'ICAR message' has not yet fully reached yet, or people with a special interest in localised production systems



Each Global Reach sub-group will have its own chairperson. The ICAR Global Reach Coordinating Team will be made up of the chairpersons of the various sub-groups, a coordinating staff member from the ICAR Office and other representatives from ICAR members who have an interest in the activities of the WG. The first tasks of the new WG will be:

- Agreeing on priorities for (and with) the sub-groups
- Providing standard material for dissemination of the ICAR message/brand
- Providing infrastructural support, web facilities and the coordination of meetings and other activities
- Providing guidance on the interpretation and implementation of ICAR Guidelines
- Facilitating links and networking opportunities with industry leaders e.g. breeder associations, the FAO, government agencies etc.
- Providing guidance on workshops, platforms for networking and exchange forums.

It is envisaged that a sub-group for Central and South America will be established at the forthcoming ICAR Biennial Session in Puerto Varas, Chile, in October 2016.

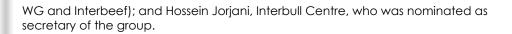
4.2. Expert Group of the GENOEX-PSE Implementation Task Force

The ICAR Board appointed the Expert Group of the PSE Implementation Task Force and identified SNP listing, file and content structure, rules for SNP exchange and

permissions/authorisations as the priority tasks of the group. It nominated Brian Van Doormaal as chair and the following members of the Expert Group: Matthew McClure, Irish Cattle Breeding Federation (Parentage Recording WG); George Wiggans, Animal Genomics and Improvement Laboratory (Parentage Recording WG); Louise Marguin, Institut de l'Élevage, France (nominated by Interbull Steering Committee); Romy Morrin-O'Donnell, Weatherbys DNA Laboratory (Genetic Analysis WG); Tom Lawlor, Holstein USA (Breed Association WG (Dairy), Johnny Mackay, Aberdeen Angus Cattle Society (Breed Association



GENOEX-PSE implementation



4.3. Certificate of Quality

The ICAR Board has awarded the Certificate of Quality for Laboratory Services (Milk Analysis) to the Faculty of Agriculture, University of Novi Sad, Serbia.



ICAR Groups

CoQ

Recording and Sampling Devices SC

5. News from Sub-Committees and Working Groups

5.1. Recording and Sampling Devices Sub-Committee

The Sub-Committee continues to be engaged on multiple levels for testing and certification of new milk recording and sampling devices and software used by these devices for milk recording. The RSD-SC is also evaluating the development of testing and approval of tissuesampling devices for collection of genetic material and evaluating other classes of recording devices, including those evaluating body condition scores and other sensors of interest.

Welcoming three new members from the UK, Denmark, and Germany, the RSD-SC held a conference call in January 2016 to reaffirm the work plan for the group. In addition to the testing of devices, a review and potential revisions to Section 11 of the ICAR Guidelines will occur prior to the ICAR meeting in Chile later this year. The RSD-SC is pleased to reaffirm the commitment of our three test centres in France, Netherlands, and Germany to continuing the work of Service-ICAR.



As outlined in the ICAR guidelines, both member organisations and device manufacturers are asked to provide a report to the RSD-SC on devices in service as well as any comments, concerns, or challenges that they would like to the sub-committee to consider. A formal letter requesting this report will be sent in March 2016. The RSD-SC asks that these reports be returned by 31 May 2016 for consideration by the sub-committee, which is meeting in Rennes, France, in June 2016.

Interbull SC

Interbull ISO certified

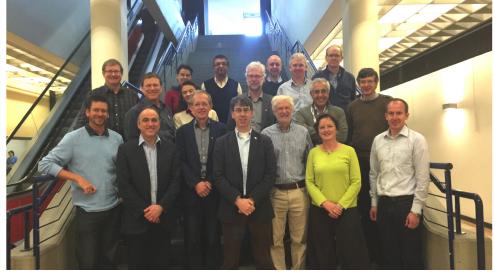
5.2.1. Interbull Centre is now ISO 9001 certified

5.2. Interbull Sub-Committee

In 2013 Interbull Centre started the process to achieve SS-EN ISO 9001: 2008 certification. This resulted in November 2015 in a successful main audit performed by the certification body Bureau Veritas, and on 13 January 2016 Interbull Centre received the SS-EN ISO 9001: 2008 certification.

This process, overseen by the quality manager Valentina Palucci, has enabled the Interbull Centre to review its procedures and documentations, and put together a quality manual, having the customer's satisfaction as its main goal.





Representatives of the ICAR Board, Interbeef Working Group and the Interbull community at the Interbull Strategy Planning meetings (Verona, Italy; February 2016)'.

5.2.2 EU Reference Laboratory

5.2.3. Interbull Strategic Planning

2016 in Puerto Varas, Chile.

The Interbull Centre, located at the Swedish University of Agricultural Sciences (SLU), has recently been confirmed as the EU Reference Laboratory for Zootechnics for 2016 and 2017 with associated funding. The Interbull Centre has been the EU Reference Laboratory for Zootechnics since 1996.

The Interbull Centre is the operational unit of ICAR's permanent Sub-Committee Interbull

On 4 and 5 February, a strategic planning meeting was conducted involving the Interbull Steering Committee, Interbull Centre Managers, and representatives of the Scientific Advisory Committee, ICAR Board and Interbeef Working Group. The outputs of the meeting will be documented in a draft Interbull Strategic Plan, which will be circulated for consultation amongst Interbull Service Users during 2016. The final plan will be presented during the Interbull Business Meeting on 24 October

Strategic plan

Interbull reference lab

Interbull in Puerto Varas

5.2.4. ICAR 40th Biennial Session and Interbull Meeting in Puerto Varas

The 2016 Interbull Annual Meeting will be held during the 40th ICAR Biennial Session in Puerto Varas; the Interbull Business Meetings and Open Meetings will be on Monday 24 and Tuesday 25 October 2016 (see www.icar2016.cl and elsewhere in this newsletter, for programme and registration details).

Interbull at the EAAP

5.2.5. Joint ICAR-Interbull session at EAAP 2016 in Belfast

The 67th annual conference of EAAP will be held from 29 August until 2 September 2016, in the heart of Belfast and on the banks of the River Lagan. It promises to be a great opportunity again to showcase the best of animal science, research and livestock production to an international audience.

The session titled "The use of genomics to improve disease and welfare traits" will be jointly organised by Interbull, ICAR and the EAAP Cattle and Genetics Commissions. We like to invite you to submit relevant abstracts through the EAAP 2016 website www.eaap2016.org/abstracts, where you will also find further guidelines.

Milk Analysis SC

5.3. Milk Analyses Sub-Committee

5.3.1. Proficiency Test 2016

Proficiency Test 2016

In February the ICAR Proficiency Test 2016 for cow milk was launched.

From this year the proficiency testing scheme has been extended from 'reference' testing to also include 'alternative or routine' methods to facilitate the participation of the milk laboratories that perform Dairy Herd Improvements milk analysis.

This possibility will involve different organisations with and without a centralised system that coordinates the milk analyses.

The ICAR Milk Analysis Sub-Committee (MA-SC) invites the newcomers to join the analytical community and to share their expertise for global analytical equivalence. 2.00 1.50 0.50 0.50 1.00

Participation to proficiency tests

The next meeting of the ICAR MA SC will be held in Copenhagen on Thursday 2 June during ISO/IDF Analytical Week.

For more information, contact the ICAR secretariat or visit the FIL website at: www.copenhagen2016.dk.

ID SC

5.4. Animal Identification Sub-Committee

SAIT in ICAR

5.4.1 SAIT: a new certifying laboratory for the RFIDs.

SAIT (South Alberta Institute of Technology (1301 - 16 Avenue NW, Calgary AB, T2M 0L4 Canada) has been appointed as a new certifying laboratory performing the "Conformance and Performance" tests for the RFIDs.



Glen Kathler from SAIT (Calgary, Canada) visiting the ICAR Secretariat



Parentage Recording

5.5. Parentage Recording Working Group

The working group has been tasked by the ICAR Board to look at creating new ICAR Guidelines for the Accreditation of Applying the Results of Genotype Analysis for Parentage Verification. We had received comments from our French colleagues regarding the proposed new guidelines and consequently they have been altered to make them clearer and more consistent. The new section 4.3 will be published on the website once the procedures for applying them have been agreed by ICAR Board.

The next section of work we plan to look at is Parentage Analysis using sequencing.

Genetic Analysis

5.6. Genetic Analysis Working Group

The Genetic Analysis WG has finalised the round for ICAR accreditation to laboratories for parentage verification by STRs and SNPS. Fourteen applications were received and, following the necessary examination, 10 laboratories received ICAR accreditation for parentage verification by SNPs and STRs. Concurrently, discussions are continuing to develop guidelines for the application of marker panels and the adaptation of new technologies. The Genetic Analysis WG interacts closely with the Parentage Recording WG, the group of experts for the GENOEX project, and with ISAG.



Conformation Recording

5.7. Conformation Recording Working Group

5.7.1 Goat Conformation

ICAR's Conformation WG worked alongside goat conformation experts from Spain, Germany, France, Croatia and Canada last year defining and compiling images for a list of 19 conformation traits in goat breeds.

The document has been discussed and is now available to ICAR members, with the intention that it will become an official recommendation document.

The working group's next focus is to establish a list of conformation defects scored for different cattle breeds in different countries. The goal is to obtain greater insight into what is scored and to be able to provide a short list that could be used by members. A survey will be sent out shortly.

Functional Traits

5.8. Functional Traits Working Group

Claw Health Atlas

5.8.1 Claw Health Atlas

In May 2015 the first edition of the ICAR Claw Health Atlas was published within the ICAR Technical Series (ISSN: 92-95014-14-6; ISBN: 92-95014-18).

Awareness of the importance of a properly functioning locomotor system to bovine health and welfare has increased around the world.

The harmonised descriptions are the result of fruitful interdisciplinary collaboration among many experts with varying backgrounds (claw health experts, hoof trimmers, bovine practitioners and geneticists), ensuring comprehensive coverage of theoretical and applied needs.

Descriptive trait definitions are used to ensure that accurate classifications are made that will support the collection of comparable and high-quality data within and across countries to support many activities (for example, genetic evaluation).

To date, eight translations have been produced (see below). These are on the ICAR website at www.icar.org/index.php/publications-technical-materials/icaratlas-of-claw-health-and-its-translations. Languages are:

- 1. Arabic
- 2. French
- 3. German
- 4. Italian
- 5. Serbian
- 6. Slovak
- 7. Slovenian
- 8. Spanish



Some of the covers of the ICAR Claw Health Atlas, translated in different languages

Dairy Cattle Milk Recording

5.9 Dairy Cattle Milk Recording Working Group

In the last year, the Dairy Cattle Milk Recording Working Group (DCMR WG) has enlarged its activities and increased the number of actions that are expected to finalise in 2016. An increased efficiency and a better improvement in the organisation and management of the group are the priorities.

In 2015, the Members met by videoconference ensuring a correct flow of information and a shared knowledge on specific experiences. For discussion in the Chile Meeting, the group is developing a new strategic plan to be implemented. Meeting are also scheduled in March in Helsinki and then in Prague, aiming to the finalisation of the Guidelines that are under the responsibility of the group. In particular, amendments to Section 2 will be finalised.

Monitoring new technologies and the improved milk recording method are the new aspects to be included into the new edition of the Guidelines. Currently, such amendments are under discussion with the members of other ICAR Working Groups and with selected leading experts; the DCMR WG thanks all these professionals for their valuable feedbacks.

In 2016, the results from the survey on "World Wide Trends in Milk Recording" will be finalised. The DCMR WG is also working on a manuscript that shows the results of such survey, including data that were not previously published. The results of the survey will be also submitted for publication in the Journal of Dairy Science and the draft of this manuscript is under preparation.

The involvement of the group in these aspects will continue, particularly in relation to the calculations of milk yield production. The main expected achievements for the future are:

- Monitoring any new technology related to the milk recording sector.
- Monitoring the milk recording activities, not limiting the attention to the ICAR member countries.
- New services beneficial to the ICAR members.
- 24-hour and new lactation calculations aiming to a vision for the future

Discussion on the policy of the group in relation to the evaluation of a new 24-hour and lactation calculation methods is very important and is expected to follow with the necessary accuracy

The SOLID Project

6. The EU-funded project on Sustainable Organic and Low Input Dairying (SOLID)

Service-ICAR is a partner in the EU-funded project SOLID, together with 24 other small and medium-sized enterprises and research institutions. The project is aimed at supporting developments and innovations in organic and low-input dairy systems to optimise competitiveness, while maximising the potential of these systems to deliver environmental goods and biodiversity, and is also aimed at optimising economic, agronomic and nutritional advantages for the development of innovative and sustainable organic and low-input dairy systems and supply chains. The project was structured



in work packages covering research, adapted breeds, forage, environmental assessment, supply chain and consumers, and socio-economic aspects.

For more information, see www.solidairy.eu.

Final conference

6.1. SOLID final conference

The final workshop of the EU-funded project SOLID will be held on 22 March 2016 from 10.00am- 12.30pm at Welsh Higher Education Brussels, Wales House, 11 Rond-Point Schuman, Brussels. The theme of the workshop will be "Future research priorities and implementation strategies in the Organic and Low-input Dairy Sector". Following brief presentations on the main outputs from the SOLID project, the workshops will split into two breakout groups: Future Research Priorities and Future Implementation of Project Outputs, followed by a report back and final discussion.

If you are interested in attending the workshop on the morning of the 22 March, please email eu-projects@icar.org with the subject 'SOLID Workshop' with your confirmation of attendance.

ICAR Session in Chile in 2016

7. The 40th ICAR Biennial Session, Puerto Varas, Chile, 24-28 October 2016

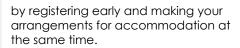
ICAR Secretariat would like to remind you about the upcoming ICAR 40th Biennial Session to be held in Puerto Varas, Chile, on 24-28 October 2016.

Preparation for this event is well advanced and we are pleased to inform you that registration is now open. To register, please visit www.icar2016.cl/registration-form/.

The timeframes for registration is as follows:

- Early bird: until 10 May
- Regular: 11 May to 19 September
- Late: 20 September
- On-site: from 24 October

During your online registration you will be able to book accommodation for your conference stay. We recommend you take advantage of the discounts available



For comprehensive information about the event, please visit www.icar2016. cl/.

Call for papers

7.1 Call for papers

In March, a call for papers will be circulated; details and procedures for the submission of the proposed contributions for the session will be described.



In the meantime, ICAR advises that there will be nine Technical Sessions (T.S.). You are invited to submit your contribution to one or more of these sessions. The sessions are:

- T.S.1: How can you use genomics? Chair: Toine Roozen
- T.S.2: Manufacturers showcase Chair: Ken Evers and Steven Sievert
- T.S.3: Milk analysis: what's next? Chair: Gavin Scott
- T.S.4: Monitoring functional traits in performance recording systems Chair: Christa Egger Danner
- T.S.5: Supporting technologies for animal production collecting data Chair: Steven Seivert
- T.S.6: Milk recording: a tool to improve dairy production. Chair. Pavel Bucek and Neil Petreny
- T.S.7: Improving production in small ruminants Chair: Jean Michel Astruc and Zdravko Barac
- T.S.8: The role of breeding associations in animal improvement Chair: Matt Shaffer and Suzanne Harding
- T.S.9: Enhanced beef production with recording systems Chair: Andrew Cromie

Other meetings

IDF

8. Meetings of other international organisations

International Dairy Federation Parallel Symposia, 11-13 April 2016

The symposia will be held in Dublin, Ireland, comprising the Concentrated & Dried Milk Products Symposium, and the Cheese Science & Technology Symposium.

Leading experts will contribute keynote talks during a special feature on Infant Milk Formula and Adult Nutritionals, which will address important developments concerning regulation, analytical methodology and novel ingredients.

The programme is now available at

www.idfingredientsandcheese2016.com/ preliminary_programme.html.



ADSA

Large Dairy Herd Management Conference, 1-4 May 2016

The conference will be held in Oak Brook IL (USA). This conference is designed to provide an opportunity for authors to obtain feedback on the chapter papers developed for the Large Dairy Herd Management e-Book. The conference includes 96 sessions – for the full list of topics and editors visit the conference website at: www. adsa.org/Meetings/LargeDairyHerdManagement.aspx.

Key stakeholders in the international dairy science community will be a part of the conversation about the topics above that affect large dairy herd management.

ASAS-ADSA-CSAS-WSAS

ASAS-ADSA-CSAS-WSAS 2016 Joint Annual Meeting

'Animals and Science: Big Solutions for Grand Challenges', 19-23 July 2016, Salt Lake City, Utah, United States.

For more information, visit www.asas.org/JAM2016.

SAS-ADSA°-CSAS-WSASAS / 19 - 23, 2016 • SALT LAKE CITY, als and Science: Big Solutions for Grand Cl the American Dairy Science Association® (ADSAB), the Wester Initial Science (CSBR) will held the 2016, Joint Americal Meeting

IDF / ISO Analytical Week

IDF / ISO Analytical Week 2016, Copenhagen, 30 May – 3 June 3

Copenhagen hosts the IDF / ISO Analytical Week 2016, 30 May - 3 June 2016. The venue is Axelborg in the heart of Copenhagen, just opposite Tivoli.

For further information, visit www.copenhagen2016.dk.





