

MEETING OF THE ICAR SHEEP, GOAT, SMALL CAMELIDS WORKING GROUP

9 February 2018, Auckland, New Zealand

Draft minutes

Attendees:

Jean-Michel Astruc (French Livestock Institute-IDELE | France),
Joanne Conington (SRUC | UK),
Daniel Brown (AGBU/MLA | Australia),
Sharon McIntyre (Beef & Lamb NZ | New Zealand),
Elena Ciani (University of Bari | Italy),
Sotero Salaris (Agris Sardegna | Italy),
Antonello Carta (Agris Sardegna | Italy),
Henning Hamann (State Office for Spatial Information | Germany),
Luiz Brito (University of Guelph | Canada),
Ming-Che Wu (Taiwan Livestock Research Institute | Taiwan)

The meeting was held from 1:30 to 5:30 pm in Auckland room in Grand Millennium Hotel and was chaired by Jean-Michel Astruc (chairperson of the SGC-WG).

Agenda

1-Opening and welcome.....	2
2-Membership of the SCG-WG and its Expert Advisory Groups (EAG)	2
3- ICAR Website – section SGC-WG	3
4- Activities of the Fiber Recording EAG	3
5- Activities of the Milk Recording EAG	4
6- Activities of the Meat/Reproduction/Maternal Trait Recording EAG	5
7- Technical sessions ICAR & WCGALP.....	8
8- Information on SMARTER project	8
9- Date of next meetings.....	9
10-Any other business.....	9
11-Closure.....	9

1-Opening and welcome

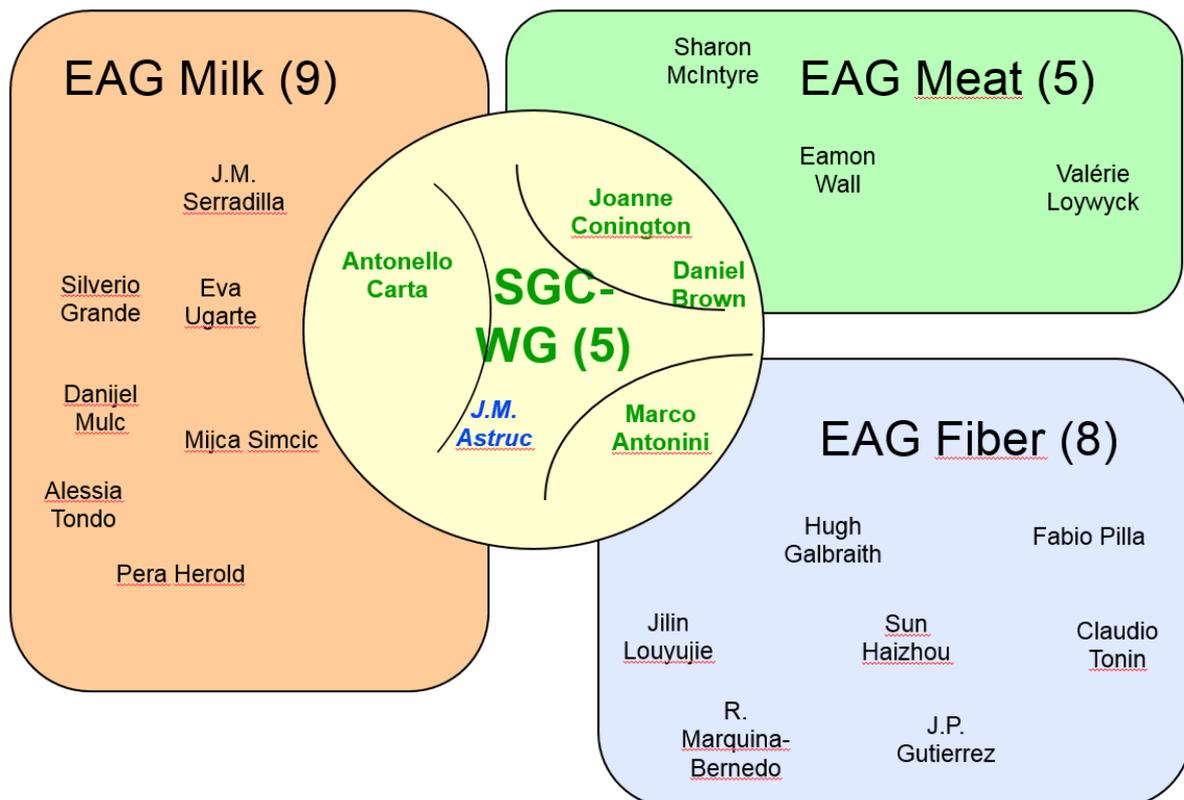
The meeting was opened: 5 out of 10 attendees are not member of the SGC-WG. The agenda (see above) was adopted.

2-Membership of the SCG-WG and its Expert Advisory Groups (EAG)

Since the last meeting in Edinburgh, the following changes are agreed:

- Zdravko Barač stops his activity in WG and proposes to be replaced by Danijel Mulc (responsible for all ICAR activities in the Croatian Agricultural Agency) in the EAG Milk.
- Marco Antonini proposes to remove Zheng Wenxin, Wenguang Zhang and Oscar Toro from the EAG Fiber and to add Fabio Pilla and Sun Haizhou.
- The SGC-WG itself is composed of Jean-Michel Astruc, Joanne Conington, Marco Antonini, Daniel Brown and Antonello Carta.

The figure below is an update of the membership of each part of the WG:



Actions:

- Membership from South Africa and Spain is still pending.
- We should ensure representation from a less developed nation, given the current impetus in small ruminants internationally.
- Promote the commitment of each member.

3- ICAR Website – section SGC-WG

It was suggested in Edinburgh to improve the page dedicated to the SGC-WG. Add all the members of the group. The following updates have been implemented:

- Introductory section on the WG with links to the pages of the former WG from which the SGC-WG has been formed: Performance Recording on Dairy Sheep, Goat Performance Recording, Animal Fiber Recording. These links are important because there are different useful documents stored in these pages (minutes, slides, notes).
- List of all the members with their organization and country.
- Guidelines and survey section, with links to:
 - ✓ the guidelines section 14 (Alpaca and Goat Identification and Fiber) and the guidelines section 16 (Dairy Sheep and Goats).
 - ✓ the international survey on sheep and goats
- Documents section with the different documents related to the WG: terms of reference, pictorial summary of the organization and membership of the SGC-WG, minutes and slides of meetings.

4- Activities of the Fiber Recording EAG

A quick information is given on behalf of Marco Antonini, chairperson of the Fiber Recording EAG.

- As stated above, Zheng Wenxin, Wenguang Zhang and Oscar Toro are removed and Fabio Pilla (from University of Molise, Italy) and Sun Haizhou (from Inner Mongolia Academy of Agriculture and Animal Science) are added. Through further discussions with Fabio Pilla during the WCGALP Congress, his membership must be still discussed.
- The Fiber Recording EAG is responsible for the section 14 guidelines for Alpaca and Cashmere Goat Identification and Fiber.
- Future directions:
 - Set up guidelines for alpaca and cashmere collection centers.
 - Start a work on recommendations on wool.
 - Carry out a survey on wool (questionnaire on wool more detailed than the one on meat/reproduction presented at this meeting). Present the results of this survey in June 2019 in Prague, before starting the work on recommendations on wool.

There is a strong willingness among ICAR to tackle the recommendations on wool recording. Regarding the discussion during the meeting, the scope should be both merino and not merino wool. The question must be discussed with Marco.

5- Activities of the Milk Recording EAG

5.1 Evolution of the guidelines

The updates concerned the section 16 Dairy Sheep and Goats, and more precisely the Goat sub-section. It consisted in:

- Including new methods (Z and Y), related with 2 daily milking for milk yield and 1 daily milking for sampling.
- Précising the correction method for the above design
- Updating the frequency and number of visits, and the interval between kidding & test-days

Following the decisions taken in Edinburgh, the achievements were:

- June 2017: take into account discussions in Edinburgh,
- Wait for last suggestions until September 2017,
- 13/11/2017: send writing (old-style document) to ICAR secretariat
- New guidelines put in new-style document by ICAR Secretariat
- Wait for adoption at GA in Auckland.

On 9th February, at the GA, the updates were finally adopted.

During the meeting, the proposal was to extend these updates (namely methods Z and Y) to dairy sheep on the same pattern as for goats.

The question raised by Pera Herold about long lactation in goats were postponed to the next meeting (Pera Herold was not present in Auckland).

5.2 Synthesis of the yearly enquiry in dairy sheep

8 countries have submitted data in 2016 (+ 1 in 2015).

A set of slides synthesizes the data provided and are available on the website.

The figures of recorded ewes are as follows, ordered by decreasing number of ewes:

Italy	358,249
France	313,292 (+542,948 in D recording)
Spain	275,196
Slovak Rep.	6,011
Croatia	5,261
Slovenia	2,325
Czech Rep.	1,597
Germany	932
Canada	695

5.3 Synthesis of the yearly enquiry in goats

9 countries have submitted data in 2016 (+ 2 in 2015).

A set of slides synthesizes the data provided and are available on the website.
The figures of recorded ewes are as follows, ordered by decreasing number of ewes:

France	256,478
Italy	58,293
Spain	55,645
Switzerland	21,887
Germany	6,996
Canada	6,098
Czech Rep.	5,755
Croatia	3,778
Serbia	2,236
Latvia	988
Slovak Rep.	243

6- Activities of the Meat/Reproduction/Maternal Trait Recording EAG

6.1 Survey on the meat / reproduction / maternal trait recording

It was decided in Edinburgh to carry out a survey on meat/reproduction/maternal trait recording to start the work on the corresponding guidelines. The content of the survey was discussed during autumn 2017, based on the template, ICAR Secretariat set up a questionnaire with the Survey Software and sent it to ICAR members and a targeted additional people/organizations, based on a list produced by Joanne. An extraction of the submitted replies were provided to Joanne on 25/01/2018. The goal was that Joanne present the first result of the questionnaire at the WG meeting.

Survey results summarised 15 responses from 13 countries. The countries and organisations are:

Czech Rep	Czech Moravian Breeders' Corporation
Tunisia	Office de l'Élevage et des Pâturages
Australia	Sheep Genetics A business unit of meat and livestock Australia
Croatia	Croatian agricultural agency
Uruguay	INIA
Cyprus	Agricultural Research Institute, Ministry of Agricultural
New Zealand	B+LNZ Genetics Limited
Luxembourg	CONVIS s.c
UK	SRUC
Slovenia	University of Ljubljana
USA	National Sheep Improvement Program
UK	Signet Breeding Services
New Zealand	Beef + Lam genetics
France	France Genetique Elevage
Ireland	ConsultWickham

The results are presented. A performance recording system exists on fine wool animals in 3 organizations out of 11 responses, on maternal animals (9/11) and in terminal animals (7/11). Information are given on reproduction traits, meat traits (including growth and carcass characteristics), lamb survival, ewe survival/stayability, wool characteristics. Performance test stations exist in 4 countries out of 9. The frequency of genetic evaluations ranged from weekly to annually. 2 countries are running international evaluation. 7 other are considering across country evaluation in the future. Genomic selection is currently effective in 2 countries, planned in 4 countries, considered for the future in 4 other countries.

6.2 Methodology proposed by ICAR for drawing up guidelines

The specifications of the ICAR Guidelines System and Associated Tools are presented. The project was initiated in 2017 and aimed at redesigning the structure and platform for the maintenance and access of the ICAR guidelines. It describes the guidelines of the database and therefore the methodology to write the guidelines. We propose to draw up the guidelines using this methodology.

The writing must contain 3 parts: an overview, the guideline and annex(es).

The overview contains a description of a section of the guidelines and provides context for the guidelines and annexes contained therein. The guideline contains sufficient details for a well informed expert in the fields covered by the guideline. An annex provides details relevant of the guidelines contained in the section.

The process for guideline development is as follows:

- determine the scope of the guideline
- experts (SGC-WG) produce a draft guideline with as many iterations as necessary.
- editorial review.
- publishing.

6.3 Guidelines: pilot project growth

Presentation Joanne Conington

Traits to address:

- Lamb live weight at 8 weeks. In evaluation, estimate direct & maternal effect
- Lamb live weight at 21 weeks. In evaluation, estimate direct & maternal effect
- Lamb Growth rate = daily live weight gain (g/day). In evaluation, estimate direct & maternal effect

Add adult weight (rams and ewes)

The measures called "8 weeks", "21 weeks" must be generalized. The weight at which making the measure (8 wks, 21 wks) should be proposed as an example.

It should suggested that, when there is a vaccine injection program (which is the case for growing animals), the vaccination day could be the same as a measurement day, in order to reduce the stress from either vaccination and weighing. Hence, we can have both data on growth and health on farm.

Contents: see slides presented during the meeting

6.4 Guidelines: pilot project meat quality

Presentation Daniel Brown

Traits to address:

- Live traits
 - Fat depth (mm)
 - Post weaning fat depth (mm)
 - Yearling fat depth (mm)
 - Hogget fat depth (mm)
 - Eye muscle depth (mm)
 - Post weaning eye muscle depth (mm)
 - Yearling eye muscle depth (mm)
 - Hogget eye muscle depth (mm)
- Dead/carcass traits
 - Carcass weight
 - Carcass fat
 - Carcass C-site fat
 - Carcass eye muscle depth
 - Dressing percentage
 - Lean meat yield (with different measures e.g. CT, DEXA)
- Meat science
 - Intra-muscular fat
 - Shear Force after 5 days
 - Colour (fresh, aged, retail)
 - Minerals (iron, zinc)
 - Amino acids, omega 3
 - Ph
- Sensory
 - Taste panels (juiciness, flavour, tenderness, overall liking)

The measures called “post weaning”, “yearling”, “hogget” must be generalized. The weight at which making the measure (45kg, 60kg, 70kg) should be proposed as an example.

Be specific on the trait definition. E.g. fat depth must be corrected for age or weight. Calibration and accreditation of devices must be tackled (at least mentioned), as well as measure protocols (e.g. ultrasound scanning).

Add cooking loss

Contents: see slides presented during the meeting

6.5 Guidelines: pilot project reproduction

Presentation Jean-Michel Astruc

Traits to address:

- Prolificacy
- Female fertility
- Viability (number of lambs/kids at weaning = lambs reared)
- Lamb survival (at birth, at weaning, post-weaning)

Contents: see slides presented during the meeting

Add pregnancy scanning, ewe behavior, puberty / precocity, maternal ability
Add semen production (for males in AI center)?

General discussion:

-for each trait, we must describe the protocol of measure.

-It also should be useful to propose the fixed and random effects put in the evaluation model.

-Zootechnical background should be added in the description of the traits (what is the meaning of the traits).

-Next step: *Daniel, Joanne, Jean-Michel (with the help from Valerie Loywyck) propose a draft (if possible following the new methodology to write guidelines), respectively on meat trait recording, growth recording, reproduction recording. These draft circulate and are amended by the members of the WG. The WG could make a report to ICAR 2019*

7- Technical sessions ICAR & WCGALP

During ICAR and WCGALP conference, 3 technical session were dedicated to sheep and goats:

- Sunday 11 Feb. 8:30 – 10:30 am & 11:00 – 12:30 am
Workshop: Identification, Meat & Reproduction Recording in Sheep & Goat in ICAR Member Countries
- Thursday 15 Feb.
WCGALP Session – Ovine 12:30 – 1:30 pm & 1:30 – 3:30 pm
WCGALP Session – Caprine 3:30 – 4:00 pm & 4:00 – 6:00 pm

In addition, 2 tours were concerned with sheep on Wednesday 14 Feb.:

- Deer and Sheep Event
- Dairy Sheep Event

8- Information on SMARTER project

The H2020 European project SMARTER (SMAll RuminanTs breeding for Efficiency and Resilience), proposed by INRA and gathering 26 partners from 10 European countries, ICAR and EAAP, Uruguay, Canada and China has been accepted and is due to start in late 2018 (4-year-duration). ICAR is involved in this project and will be involved in 2 main actions:

- Set up practical selection tools to benefit from inter-national cooperation in small ruminants, with 2 tasks interesting the SGC-WG:
 - Guidelines for efficiency & resilience in SR (SGC-WG)
 - Practicalities of international evaluations (x Interbull/Interbeef)
- Dissemination (along with EAAP)

Through this project, ICAR will have to propose guidelines on efficiency and resilience traits in sheep and goats, as well as build foundations for international evaluation in small ruminants in the era of genomics. This is a great challenge and the SGC-WG will be mobilized to achieve this tasks. We must think out to make members of the SGC-WG not partners of the SMARTER project to be helped to participate.

9- Date of next meetings

The next ICAR biennial sessions are scheduled:

-42nd ICAR Conference in Prague (Czech Republic) on 17-21 June 2019.

-43rd ICAR Conference in Leeuwarden (the Netherland) on 8-12 June 2020.

The next working group meeting will be held in Prague.

10-Any other business

A question was raised by the Recording and Sampling Device Sub-Committee about the relevance of separating Goats and Sheep for Device Testing and Certification for the following items:

-units of measurement

-limits of error for milk yield and fat percentage

-influence of flow rate on accuracy and sampling (flow rates for testing)

-range for milk production, F% and P% in each species

A further e-mail will be sent to the SGC-WG member for advice, feedback and directions.

11-Closure

Closure is set at 5:30 pm.