

**COST Action CA15224**  
**Action Title: Identifying causes and solutions of keel bone damage in laying hens**

**MINUTES**  
**Management Committee Meeting**  
**Dubrovnik, Croatia**  
**From 17 September 2018 to 17 September 2018**

**To be completed by the meeting secretary and circulated to the MC and the COST Association (Science and Administrative Officer)**

1. Welcome to participants

Mike Toscano (chair, nationless), Frank Tuytens (BE), Mark Williams (UK), Stefanie Petow (DE), Zlatko Janjecic (HR) Alexandra Jeremiasson (Sweden), Magnus Jeremiasson (Sweden), Brigitte Brugger (Iceland), Nilufer Coban (Turkey), Ivan Dimitrov (Bulgaria), Metin Petek (Turkey), Mirjana Djukic Stojcic (Serbia), Ian Dunn (UK), Boris Bilcik (Slovakia), Lubor Kostal (Slovakia), Renata Relic (Serbia), Beryl Eusemann (DE), Virginie Michel (F), Sabine Gebhardt (CH), Mie Blorn (DK), Zlata Kralik (HR), Vicky Sandilands (UK), Steffen Weigend (DE), Joao Mesquita (PT), Teun van de Braak (NL), Nazaret Dominguez Gasca (ES), Eva Sossidou (GR), Ine Kempen (BE)

COST representative: Melea Langbein

27 signatures on sheet

Mike thanked the WGs and SG chairs, and all participants particularly Zlatko and LOC for arranging. Thank you also to Lilian for all her contributions

Mike welcomed the participants, and in particular Melea Langbein, Scientific Officer of COST

2. Verification of the presence of two-thirds of the Participating COST Countries or, if applicable, a quorum

SK, DK, IS, BG, RS, DE, CH, HR, SE, FR, TR, BE, UK, PT, NL, ES, GR (17 countries represented, out of 24 countries)

Thus quorum (16) has been met; and voting on issues is permitted.

3. Adoption of agenda

Accepted

4. Approval of minutes and matters arising of last meeting

Proposed by Magnus Jeremiasson

Seconded by Ian Dunn

## 5. Update from the Action Chair

- a) Status of Action: start and end dates of Action, participating COST countries, participating NNC/IPC institutions and Specific Organisations.

Start 18/10/2016, end 17/10/2020

Participating countries: 24, of which 10 are ITCs Austria and Portugal joined in 2018

*Melea suggests making a matrix of countries and people down y-axis, the MC and WG headings and across the top and see where we have gaps*

We noted that some countries have never attended an MC meeting since the COST began, which makes representation of their needs difficult, and also means we find it difficult to meet our quorum of 18/24:

Produced a leaflet explaining the Action, purpose, and background in several different languages. Available on the website. If more languages required, please notify MT and if possible translate for putting on website

**Action: ALL**

MW (UK) suggests including more people from trade bodies in the COST (or in circulation of information)

- MDS (RS) – fractures less of a problem here, because lots of birds in conventional and enriched cages. So trade bodies and producers are not very interested in the problem (yet)
- ID (UK) – it may be worth the active trade bodies (BEIC, Svenska Egg) contacting those in the other countries, as more trustworthy
- LK (SK) – not sure of the response. Not such good links between production and science in SK. Would like MT to come to SK and talk to producers about the problem of KBD
- AJ (SE) – the economic impact needs to be emphasized, in a leaflet to producers
- FT (BE) – producers should also be warned of the possible public outcry if public knew of the problem, so they should be concerned...
- SG (CH) – warning producers of the outcry might make producers want to lower the awareness (because there are no real solutions yet)
- MB (DE) – producers know it is a problem, but don't know what to do.
- MT – can the Balkan nations/eastern Europe discuss how we can raise awareness of this problem in their nations
  - LK reports: in SK, most egg producers switched from conventional to enriched cages; large supermarket chains want producers to move to non-cage systems. Producers not pleased.
  - Link between research, production and welfare groups not well established cf. western Europe
  - Would like to demonstrate that these 3 groups can collaborate to help solve KBD
  - Invite MT to SK to explain the problem. MT suggested to get supporting letter from trade organisations within KBD Cost, to send to producers in SK and other eastern European nations, supporting the work
  - MT asks if there are other issues that should be discussed in move to non-cage systems, e.g. feather pecking?
  - MT to attend SK and Slovenia egg producers meetings to share information

b) Short Term Scientific Missions (STSM): review of completed reports and new applications

Formerly managed by Manja Zupan, now by Maryse Guinebretiere

Completed reports are available on the website

GP 2: 9 STSMs

GP3: 3 definite, 2 pending

Mostly focused on palpation techniques – but this should be focus of training schools, not STSMs

ML suggests: knowing who can host STSMs Useful to perhaps produce a guide on what countries can do what, what techniques

MT – initially hosts proposed STSMs for people to apply for; did not get many applications. Asked for independent applications – still not many came forward. In Bratislava MC meeting, further suggestions made, still not much uptake

Problems with ability for people to be able to take ~3 months off for an STSM. Most likely uptake is PhD students.

Have several STSMs running at same time at same institute, to make best use of host's time. Plan the STSM applications together, and then each applicant submits an (almost the same) application.

Is NOT just limited to PhD and postdocs – anyone can apply! STSMs should be finished by MAY 2019, paperwork must be submitted by 1 April 2019.

STSMs – should promote what is going on in the COUNTRY, not just the e.g. research group. So when hosting, should represent what is happening in the nation – make use of your fellow country MC members.

MT asked for a show of hands to indicate the number of people in the room who thought they may have people that would be interested in STMS – estimated at n=9

## 6. Update from the Grant Holder: Action GP3 budget status

### GP2:

We underspent by 26,000 Euros, mostly due to meetings (not as many people came as expected; hotel costs not budgeted for properly; food was cheaper in some than expected) and ITC conference grants not applied for.

The money is NOT carried forward from GP to GP; if we OVERSPEND then that will come out of the next GP (less of a problem)

### GP3: (current) May 18-Apr 19

- Lack of funds from COST to U of Bern (grant holder) for reimbursing STSMs and training schools that have taken place in this grant period. This discourages attendance and participation in general.
  - STSMs – running below predictions (8 STSMs predicted, 3 confirmed, may have 5 total)
  - ITC conference grants – 2500 Euros available per applicant (PhD students are eligible, must be giving a poster or oral presentation at the conference, conference preferably in Europe), but currently no ITC uptake. (The grant was advertised to the ITC members.) However, COST chair/members cannot guarantee the funds – it will have to be approved by the COST office when the budget is submitted. Commitment to go to the conference is usually due before the budget is set.
    - ML suggests these would have a high priority in a grant proposal, so these would be unlikely to be rejected, up to 10% of the total budget – she will confirm with Mafalda Quintas.
    - 10,000 Euros are available between now and 01 May 2019 that can be used for ITC grants, but no uptake – MT will channel this money elsewhere
- Action: MT**
- Dissemination meetings about COST activities
    - M Toscano at Slovak Producers conference, Zagreb, Croatia, Feb 2018
    - E Sossidou, 6<sup>th</sup> Mediterranean Poultry Summit, Torino, Italy, June 2018
  - Scientific meeting – causes of keel bone damage and
  - Histology training school, Edinburgh, UK Jan 2019
  - Stakeholder input meeting, Vencomatic facilities, Netherlands Feb or March 2019

### GP4: grants may be more restricted in May 19-Apr 20

ES (GR) suggests a further training school in collaboration with WPSA WG 11 (Education, training)

In order to try to spend funds, when organizing meetings, if fewer people accept than expected, their invitation can be withdrawn and invite others

ITCs – we will plan for four, based on feedback. MT to send out email to all ITC members reminding them of the grant

**Action: MT**

ES – suggestions for spending further grant money. Have a workshop for STSM projects – poster session at a conference etc. Produce a leaflet for consumers about KBD – but this is risky, could cause the producers trouble. Patent the KBD models and provide to the members

7. Update from the COST Association, if a representative is present

ML (COST) – 65% of the grant amount for the year should go to the budget holder at the start of the funding period. Funds come from EC to COST, then COST to grant holder. There is a delay between funds going between these three. COST prioritises those actions that have activities happening at beginning of the new GP. Our budget was late to be approved, and training school happened very shortly after (May is start, Geel training school happened in June). In future, we could submit our budget in DECEMBER (was submitted February 2018), then the grant can be agreed/signed well before the new grant period.

Provided a sample of producing a deliverable plan for each objective, and anticipated plan of delivery

Have a plan – for each objective, what will it look like when we have achieved the deliverable (paper, 3D model etc)

Ivan asks – can an STSM and training school overlap? ML – this would be difficult to administrate, to avoid double payment. Better if they are before or after one another (so could still benefit from being in same physical location)

8. Monitoring of the Action

10 out of 24 Action countries are ITCs (42%)

Meetings to date:

3 MC meetings held in ITC countries (100%)

Total of 86 participants reimbursed

44 females (51%)

42 ECIs

62 from ITCs

2 dissemination meetings (Mediterranean Poultry Science meeting, European Poultry Science meeting)

2 training schools (Switzerland, Belgium)

29 trainees received a grant

14 STSMs granted

11 female (79%)

8 ECIs

ITCs involved in 6 (43%)

9. Implementation of COST policies on:

- a) Promotion of gender balance and Early Career Investigators (ECI)

Christina Rufener (CH) is providing a report and recommendations

- b) Inclusiveness and Excellence (see below list of Inclusiveness Target Countries)

- ITC grants

Need to increase.

Managed by SG4

- Change in leadership roles

This was proposed at the Bratislava meeting Jan 2018

Replacement leaders and leaders swapped roles

WG and SG

- Researcher in Focus

Managed by SG4

Have had 3 (all women) – Ine Kempen, Ariane Stratman, Christin Habig

New one coming shortly

10. Follow-up of MoU objectives: progress report of working groups (15 min/WG rep)

WG 1 Assessment methods of KBD

Summarised by Ian D

As per yesterday. Should be quick, accurate.

Using measures of other bones may be effective, for use of e.g. genetic improvements

3 D printable models to train palpators – could these be produced and paid for by COST and provided to each country?

Using a tool to examine KBD in a number of phenotypes...

Other activities related to KBD but not funded directly by COST:

ICD to Guelph, Stefanie P To Rolin and Granada, ICD to Uppsala; Alexandro RN(?) to Uppsala;

Heather McC and Bob F from UK went to Celle; Bjorn Anderson and ICD went to Copenhagen vet school

Of papers mentioned, only second to last doesn't apply re: # of min COST countries

MW As part of BEIC Lion Code, field staff for the major packers will be trained by U of Bristol in palpation, in order to record KBD

ES and FT – use behavior, pain, welfare measures AS INDICATORS of KBD – as diagnostic tools for KBD (not as consequences of KBD)

## WG 2 Impacts on welfare and production

Summarised by Mike T

Outputs: review paper by Anja Brinch Riber, *Frontiers in Veterinary Science*, Open Access; research project by C Ruefener, using colour dye and production and radiographs in individual hens, showed that >50 weeks, productivity goes down if KBD (but only CH represented). C Ruefener, using tracking methods, looked at impact of KBD on positioning in an aviary (CH only). Submitted to *Poultry Science*; S Patal research, relationship between egg production and KBD. Mirjana and Eva – egg quality and Greece, to be published.

ONLY papers with 2+ COST countries represented will count towards COST outputs  
If 3 or more COST countries, can apply for Open Access funding

## WG 3 Causes and interventions

Summarised by Mirjana Djukic Stojcic

As per yesterday

Additional STSM – Ine Kempen in Sweden with Alexandra – using palpation on commercial farms

MW – is there new information coming out about KBD? MT says due to refined methods, evidence they have in Bern is that KB fracture is HIGHER than originally expected

## 11. Scientific planning

### a) Scientific strategy (MoU objectives, GP Goals, WG tasks and deliverables)

- Training school on histological methods (Ian Dunn)  
16-17 January 2019, Edinburgh, UK

Objectives: To familiarize attendees with:

1. the special features of avian bone; 2. range of basic methods available to investigate the morphometry of avian bone; 3. methods to process and cut avian bone; 4. methods of identifying and staining features of avian bone; 5. pathology of avian bone

Who can go? ANYONE from a COST member country (n=38), EVEN ones that have not agreed to the KBD COST MoU

Max numbers 16 (But it can be run again...)

- Underlying causes of KBD meeting (1.5 days)– 14-15 January 2019, Edinburgh, UK  
Environmental causes, etiology of KBD, pathology of damage  
External speakers can be invited, can only attend once in the lifetime of the Action.  
Max numbers 50  
To be reimbursed by COST, if person is a member of the KBD COST (accepted the MoU)  
(ML says budget should not necessarily be a constraint – get expression of interest from people to see if budget needs to be expanded)

STSM recipients can produce posters to display at the workshop, and be reimbursed to attend the meeting

b) Action Budget Planning, including specifics GP

- GP3: Contingencies for funding shortfalls in key areas; increased budget for Scotland meetings

10,000 Euros for ITC conference attendance in the budget – has not been used; not as many STSMs have occurred

Proposals:

- a) If there are unused funds as of 01 Oct 2018 for STSMs and ITC conference attendance, then increase hotel allowance for MC meeting in Dubrovnik to 120 Euros (but to be confirmed by ML)  
Vote taken, all in favour of supporting

- b) If there are unused funds as of 01 Dec 2018 for STSMs and ITC conference attendance, then they will be used to increase the attendance budget for the two Edinburgh, UK meetings  
Vote taken, all in favour of supporting

- GP4:

MT will build the budget for DECEMBER, draft to be circulated in November

To be included:

ITC conference grants (4 x 2500 Euro)

Keel bone training school (Serbia)

Keel bone training school (Slovakia)

Keel bone training for producers and/or egg inspectors – is the video enough? Do we need to tack on to a trade show? Do we need to entice the technical people from hen-related companies to a meeting?

WG meeting in Bern, around the time of ICPD conference, 27-29 June 2019

Work on paper from KBD causes, Edinburgh meeting

Hotel permitted costs to be set at max 120 Euro per night

Continuation of stakeholder development

Open Access grants (up to 6000 Euro) – must have 3 COST countries involved as authors

d) Dissemination planning (Publications and outreach activities)

- Stakeholder update (Ine Kempen)
  - See her presentation for further details

Meeting held in Zagreb, Feb/March 2018.

To close the gap between science and practice, by, defining what kind of information farmers need, and evaluate how feasible methods of assessment are (costs vs productivity)

Stakeholder meeting in Zagreb 27/02-01/03/18

Outputs – costs vs productivity (Daniel Hoop); training video on keel bone assessment (MT), leaflet (MT) – PDF digital and printed

Second stakeholder meeting: Feb or March 2019, Vencomatic facilities, the Netherlands

12. AOB  
none



13. Location and date of next meeting (GP4)

Next MC meeting – MDS suggests tacked onto meeting in Montenegro in June (but they need to join the COST); it can also always be held at the COST office in Brussels; MT says investigate at Bern

Next WG meeting, Bern-based around ICPD, June 2019

14. Summary of MC decisions

1. Regarding funds in GP3:

- a) If there are unused funds as of 01 Oct 2018 for STSMs and ITC conference attendance, then increase hotel allowance for MC meeting in Dubrovnik to 120 Euros (but to be confirmed by ML)  
Vote taken, all in favour of supporting
- b) If there are unused funds as of 01 Dec 2018 for STSMs and ITC conference attendance , then they will be used to increase the attendance budget for the two Edinburgh, UK meetings  
Vote taken, all in favour of supporting

2. MT to circulate GP4 budget suggestions in November.

15. Closing

The meeting closed at 16:20