

COLOSS 'Beekeeping' (= 'B-RAP') Core Project

COLOSS Annual Conference, Murcia, Spain - 2014.

Session notes from 7th September 2014

Introduction

This brand new Core Project has been created with the specific intention to support beekeepers and beekeeping. No activities under this Core Project have taken place to date.

Bees have survived quite well in the wild over the last 50 million years, ranging from equatorial to polar regions. They achieved this by finding suitable dispersed nesting sites, exploiting resources effectively, minimising disturbance to their brood nest, and reproducing via swarming. Selection has been largely based on viability.

In contrast, modern beekeeping typically results in high colony densities, sometimes in unsuitable sites, with frequent nest manipulations, often aimed at preventing swarming; susceptible colonies are maintained by use of drugs allowing susceptible genes to be maintained in a population; forage resources in intensively managed landscapes can expose colonies to pesticides; and beekeepers unilaterally select based on productivity and temper.

There are many challenges for both bee research and training to overcome the discrepancy between evolutionary adaptation and modern beekeeping practice. Practical solutions are needed to:

- Optimise nutrition
- Minimise pathogen transmission
- Develop natural-like nest management
- Develop effective pest infestation controls based on damage thresholds
- Promote biotechnical control as method of preference
- Reduce pesticide exposure
- Select based on vitality first

Colony Monitoring, CSI Pollen, Varroa Control, RNSBB, and Apitox all touch on aspects of these. This Core Project is focussed on ensuring that learning & understanding generated reaches the beekeepers and leads to modified practice.

1st Core Project Meeting

Thirty delegates of the COLOSS Annual Conference, from 8 countries, attended the first meeting of the 'Beekeeping' Core Project. A list of named participants is appended. Ralph Büchler and Ales Gregorc led initial discussions but highlighted that their involvement with other projects unfortunately prevented them from taking a leading role in this Core Project. Although unable to attend the meeting, **Flemming Vejsnæs and Preben Kristiansen later agreed to jointly Chair this group.**

Three focal points were identified for the 1st meeting:

- What participants wanted the group to develop and achieve?
- How to disseminate knowledge effectively from COLOSS to beekeepers?

- Organisational matters: roles and meetings.

Group Objectives / Interests:

Round-table discussions resulted in the following being identified as areas of interest by attending participants:

- Nutrition and its improvement; feeding methods and diets
- Interactions between genetics and the environment; conservation of locally adapted populations; motivating beekeepers to promote locally adapted populations
- Spread results of the GEI experiment to the beekeeping community; transfer knowledge to the “practical world” by engaging with queen breeders
- Highlighting the association between honeybee health and productive beekeeping
- Simplifying good beekeeping practice to encourage and improve on its take-up
- Comparison and review of beekeeping management and diagnosis; recognition of vital functions
- Sustainable varroa control with reduced emphasis on chemicals
- The relationship between environmental factors, honeybees and wild bees.
- Communicating the interaction between multiple factors in an easily understandable manner
- Differences between how an individual and a colony responds; ability to buffer negative effects
- Defining a healthy colony
- Knowledge transfer; two-way flow between beekeepers and scientists; importance of listening to beekeepers’ needs; translating science into an understandable format
- Active transfer of information and understanding into practice and policy
- Adopting a different approach that recognises beekeepers as the “customer” of scientific knowledge
- New mission of COLOSS – importance of introducing our mission to the beekeeping community to promote the mutual exchange of ideas and information; COLOSS press releases to be distributed more widely to beekeeping communities – either translated or rewritten potentially as an informal article, where appropriate.

Approach:

The benefit of involving professional support, e.g. sociologists and market researchers, to explore unfamiliar but effective methods to better engage and interact with the beekeeping community was highlighted. A forum including beekeepers is likely to be needed to break the perception of “us” & “them”. Experience in Austria and Germany has demonstrated that drawing an audience in with “tasty” desired subjects can make them more receptive to other important learning topics. Some beekeepers have negative perceptions of scientists and it is therefore important that researchers are open and receptive to feedback. It is equally important to highlight that there is no magic solution or “magic bullet” - e.g. twenty years on and we are still struggling with varroa. American knowledge transfer experience has shown how a ‘network analysis’ can be hugely beneficial in identifying who people get information from, i.e. receptive people of influence and trust, and help guide who best to interact with to assist with disseminating information to improve future practice. There are many associations, advisory bodies, and extension agencies operating in different countries already engaged with disseminating

information. We should share our objectives with such groups and ask for their assistance in communicating recent key knowledge.

Differences in scientific opinion are confusing to beekeepers as they are to the general public. Importance of focussing on those areas where general consensus is reasonable well established, but also clarify how consensus is reached and not based on individual findings. There is a duty to society to make our information useful in an understandable and informative way. Even where no right solution exists, complementary approaches can be adopted to deliver economical results in the long-term, even if not in the short-term. We need to be realistic on our goals – we cannot solve all problems but can build on existing & developing knowledge; it is essential that we motivate the beekeeping community to adopt effective new approaches even when they may seem more complicated than traditional methods. Language is a hurdle that needs to be overcome; English predominates the scientific literature but is not universally understood by beekeepers around the world.

Workshop:

A workshop was identified as the best vehicle to develop ideas further. Market researchers, network analysts and/or knowledge exchange professional should be approached and ideally invited to such a first workshop. Yves Le Conte suggested that a team of sociologists in France may be able to help; Fabrice Allier presented a useful poster on a project on communication and understanding between farmers & beekeepers involving role playing at the EurBee 6 conference that may be relevant.

Two potential venues for a workshop were proposed:

- Plan A = Bologna (local organisers: Cecilia Costa and Piotr Medrzycki)
- Plan B = Athens (local organiser: Maria Bouga; assistance from Asli Özkirim)

Organisers will need to check with local management to confirm the venue for the workshop and available dates. Although the date cannot be fixed at this stage, the intention is to aim for spring 2015.

A core group was identified to support the 2 joint Chairs (Flemming Vejsnæs and Preben Kristiansen), the group and preparations for the workshop:

Aslı Özkirim , Ales Gregorc, Cecilia Costa , Dennis vanEngelsdorp, Malgorzata Bienkowska, Maria Bouga, Patricia Aldea Sanchez, and Ralph Böhler.

Core Project name:

The 'Beekeeping' name of this Core Project did not seem to reflect its main purpose of promoting the two-way transfer of knowledge and information between beekeepers and bee researchers. Peter Kennedy suggested an alternative – an acronym of **B**ridging bee **R**esearch **A**nd beekeeping **P**ractice (in short: Bridging Research & Practice), i.e. "B-RAP". B-RAP is also a play on words as 'rap' can be a form of communication (a slang term referring to oration or speech performed in time to a beat). The change in name was put to the Conference delegates and was accepted.

B-RAP (= Beekeeping) Core Project					
First name(s)	Surname	Country	Institution	Email	Alternative email
Joint Chairs					
Flemming	Vejsnæs	Denmark	Danish Beekeepers Association	fv@biavl.dk	
Preben	Kristiansen	Sweden	Swedish Beekeepers Association	preben.kristiansen@biodlarna.se	preben.kristiansen@apinordica.se
Meeting Participants					
Ales	Gregorc	Slovenia	Agricultural Institute of Slovenia	ales.gregorc@kis.si	
Andone	Estonba	Spain	The University of the Basque Country	andone.estonba@ehu.es	
Anika	Libor	Austria	University of Graz	anika.loewe@uni-graz.at	annilion@gmail.com
Aslı	Özkirim	Turkey	University of Hacettepe	ozkirim@hacettepe.edu.tr	asli.ozkirim@gmail.com
Aulo	Manino	Italy	University of Turin	aulo.manino@unito.it	
Bjørn	Dahle	Norway	Norwegian Beekeepers Association	bjorn@norbi.no	
Cecilia	Costa	Italy	CRA-API	cecilia.costa@entecra.it	
Ciro	Invernizzi	Uruguay	University of the Republic	cirobee@gmail.com	
Daniela	Laurino	Italy	DISAFA, University of Turin	daniela.laurino@unito.it	pharsaliait@yahoo.it
Dennis	vanEngelsdorp	USA	University of Maryland	dennis.vanengelsdorp@gmail.com	
Hervé	Giffard	France	Testapi SARL	giffard.testapi@wanadoo.fr	
Jurek	Wilde	Poland	Warmia and Mazury University	jerzy.wilde@uwm.edu.pl	
José Antonio	Ruiz Martínez	Spain	APOIDEA	jaruiz65@gmail.com	info@apoidea.es
Karina	Antúnez	Uruguay	IIBCE	kantunez@iibce.edu.uy	kantunez03@gmail.com
Karl	Crailsheim	Austria	University of Graz	karl.crailsheim@uni-graz.at	
Malgorzata	Bienkowska	Poland	Research Institute in Skierniewice	malgorzata.bienkowska@inhort.pl	malgorzata.bienkowska@man.pulawy.pl
María	Bouga	Greece	Agricultural University of Athens	mbouga@aua.gr	maria@meletitiki-semh.gr
Marina	Meixner	Germany	Bee Institute Kirchhain	marina.meixner@llh.hessen.de	marina-meixner@t-online.de
Nikola	Kezic	Croatia	University of Zagreb	nkezic@agr.hr	
Nor	Chejanovsky	Israel	The Volcani Center	ninar@volcani.agri.gov.il	
Patricia	Aldea Sanchez	Chile	CEAPIMAYOR	patricia.aldea@mayor.cl	plaldea@uc.cl
Per	Kryger	Denmark	Aarhus University	per.kryger@agrsci.dk	per.kryger@gmail.com
Piotr	Medrzycki	Italy	CRA-API	piotr.medrzycki@entecra.it	
Ralph	Büchler	Germany	Bee Institute Kirchhain	ralph.buechler@llh.hessen.de	ralph.buechler@t-online.de
Riccardo	Cabbri	Italy	CRA-API	riccardo.cabbri@entecra.it	
Urszula	Grzęda	Poland	Warsaw University of Life Sciences	urszula.grzed@gmail.com	
Victoria	Soroker	Israel	The Volcani Center	sorokerv@agri.gov.il	
Yasser	Inbrahim	Egypt	University of Cairo	yasseryehia76@gmail.com	yasseryehia@staff.cu.edu.eg
Yves	Le Conte	France	INRA	leconte@avignon.inra.fr	