

# NATIVE BEE BREEDING in Wester-Ross



# Objectives:

- To conserve native honey bee stocks in the Highlands.
- To facilitate their propagation among interested bee breeders.





# Background:

- Source



# Characteristics:

- Colony size: Small
- Brood nest: Compact - Pollen stored among brood





# Colour

- Workers dark brown
- Some have orange spots
- Drones black
- Queens variable





# Queen colour - 2010 queens

- Black



Striped



Yellow





# Temper:

- Running on comb – not usually.



- Clumping and stinging – Seen in colony D3m1





**Honey:**

Cappings:

Hybrid  
Creamy

Native Very  
white.





- Supersedure /swarming
- Low tendency to swarm and few queen cells produced even when dequeened.
- Supersedure is common and 2 queens often occur in the one hive

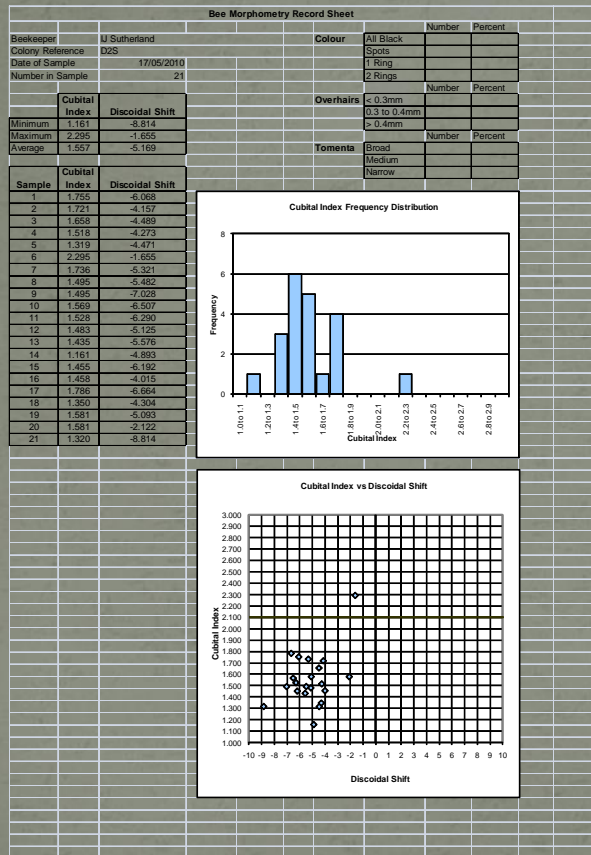


Capturing a hybrid  
swarm at  
Inverasdale apiary  
2008

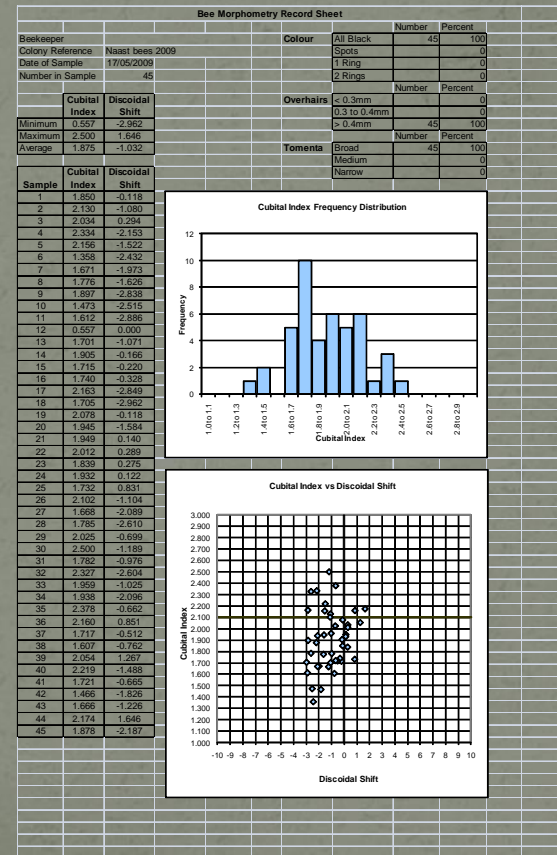


# Morphometry:

- Sutherland



- Wester-Ross





# QUEEN BREEDING

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## OBTAINING BREEDING MATERIAL

Eggs laid day 0 Mon 26<sup>t</sup> July



Comb sections containing eggs and very young larvae were transported in 2 ways

### **Royal Mail (Ruttner)**

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- Only eggs 2 days old, no travel involved. Poor.



### **(Margie)**

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All brood, involves personal travel. Good.





Day 3  
Thur 29<sup>th</sup>  
July



On arrival (9pm in the dark!) at apiary pinned combs to LABELED frames and

Inserted into centre of brood nest of strong, reception colonies overnight.



Day4  
Fri 30<sup>th</sup> July

- Next day grafted larvae into prepared frames of cups using chinese grafting tool (in sheet rain).
- Distributed to cell raiser colonies in QUEENLESS nucs for 24 hours. Fed.





# Day 5 Saturday 31<sup>st</sup> July



Dm3



D3m1



D2b

- Transferred to strong BROODLESS and QUEENLESS raiser colonies (Demarees).



D2





Day 9 Wed 4<sup>th</sup> August

- Most queen cells capped



Some queen cells also  
raised on D2 comb fragment





# Cells put into nucs

Day 14 Mon 9<sup>th</sup> Aug

- Pouring rain (again)
- 2 queen cells into mini nucs
- 2 into 4-5 frame nucs
- Rest into full hives or left in builder colony's





# Queens hatch

Day 16 Wed 11<sup>th</sup> Aug

## D2 queens



## D3 and D3m1



W. D.



YELLOW  
W





# First lay

# Mon 6<sup>th</sup> Sept

- Queens first recorded laying between 6 – 9<sup>th</sup> Sept
- 23 – 26 days after hatching.



# NEXT YEAR

2011

## NEXT YEAR

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2011

- Produce a second batch of virgins and back cross to the drones produced by the best of this years queens.

## FUTURE

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- Morphometry testing
- Production, selection and dissemination of queens.





