

## **Inspection Sheet**

The sample data sheet is key to collect all the important information in a concise and consistent way across all your colonies.

Here is an example of the type of records we use for our samples (some details may vary between programs).

The bottle and colony numbers are key to make sure YOU can interpret the results when you receive the report back

The colony configuration is the type of equipment that compose this hive, aka, the number and size of the boxes

That's an estimate of the population size

Did you see the queen or eggs?

This tells us if the colony has +/- food in stores

> Sometimes, believe it or not, we sample dead colonies

Bottle#	Colony tag		Colony config. 8/10		8/10 frames	8/10 frames Frames of	Queen status			Brood	Weight	light / medium / <mark>heav</mark> y
			Deep3/4 Medium			bees				pat <mark>t</mark> tern	Colony is dead/alive	
				_Shallow	Supers						Yard group:	
Disease Check	? NO		if yes:	Varroa	CBPV	AFB		Samples taken				
	SHBA		CDB	PMS	IBDS	EFB	pollen	Var		Virus	(virus compo	site group:
	SHBL		Chalk	DWV	SBV	shiny bees	wax moth	Nos		Pesticide	(pest. matrix	: )
Notes?												

Did you look for sign of disease when inspecting?

If no, circle "NO";

If yes, circle what you saw!

Anything else we should know about this sample/ this colony? Here's the spot

What types of samples are you sending our way?
Varroa/Nosema (wet samples), virus (live bee box or dry ice), pesticide (what kind), ...?

And how

tight the

brood

pattern

looks

If you type a "yard group", we will summarize the data in our report to compare different "groups" of colonies.

If you are using the **Emergency Response Kit**, identify "healthy" vs "weak" colonies here

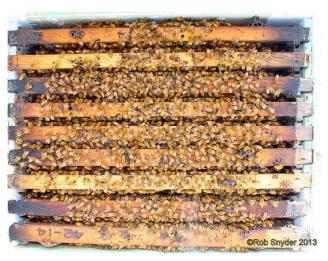
# Now here is an example filled in:

Bottle#	Colony tag	Colon	y config.	8 10 rames	Frames of	Queen status		Brood	Weight	light / medium (heavy
101000	MD-10	Deep3/4 Medium Shallow Supers			bees 8	QR		patttern 2,5		Colony is dea /alive
101909									Yard group: CFQShing	
			_JIIailow						raid group.	or donny
Disease Check	? NO	if yes:	Varroa	CBPV	AFB	entombed	Samples take	n:		•
	SHBA	CDB	PMS	IBDS	EFB	pollen	Var	Virus	(virus compos	ite group: )
	SHBL	Chalk	DWV	SBV	shiny bees	wax moth	Nos	Pesticide	(pest. matrix:	bee bread
Notes? Saw queen cells emerged										
	7		0							



#### Frames of Bees (FOB)

This is the first colony-grading measurement that should be taken. After initially gently smoking the colony, (let's assume it is two deeps), hinge the top box up, and gauge 1) how many **full frames of bees** are in the bottom box from the appearance of the top-bars and 2) how many full frames of bees are in the top box from the appearance of the bottom-bars. Do this for every box. You may adjust their FOB estimate as you work the colony.



Look to see how completely the bees are covering the frames from end to end, how far down the bees go, and how crowded the bees look. You need to count **how many frames are filled with bees**, and then subtract the frame portion with no bees.

On the photo at the left, there are 9 total frames, with about 7 totally covered in bees and the outer 2 partially covered. In this case each of the outer 2 frames is counted as a half. This box has 8 frames of bees.

By only looking at the top of the frames, you cannot tell if the bees go all the way to the bottom of the frames and you may overestimate the frames of bees. Tipping up the box to view the **underside** shows you if the frames are really full with bees or if the bees don't go all the way to the bottom of the frames. Counting both the top and bottom of frames gives a much better estimate of the actual frames of bees.

The left image (a.) has about 5.5 frames of bees and the right image (b.) has approximately 1.5 frames of bees.







### **Determining Queen Status**

Queen status can be confirmed by either seeing the **queen**, or **eggs** that appear normal (i.e. not multiple eggs per cell or eggs on the side of a cell, indicating laying workers). While a visual of the queen before sampling is ideal, it is not necessary as it will slow sampling down considerably.

Abbreviation	Queen Status	Description					
QS	Queen Seen	Queen seen while sampling					
QR	Queen Right	Queen was not seen, but eggs were seen					
QNS	Queen Not Seen	Queen and eggs not seen, but overall looks queen right					
VQ	Virgin Queen	Queen seen, but appears new, may not be laying yet					
DL	Drone Layer	Lots of drone brood interspersed with worker brood					
QL	Queen Less	Queen and young brood not found					
LW	Laying Worker	Queen dead; Multiple eggs per cell, often on the side walls					

Before sampling, check your frame to be sampled until you are confident the queen is not on it, shaking off some bees if necessary. If there are too many bees on the frame you risk missing the queen.



## **Quantifying Brood Pattern**

Brood pattern can be judged on a **scale from 1 to 5**, 1 being the poorest/most spotty, and 5 being the most solid or with the fewest open cells. Often a rating of 1 indicates a brood disease or queen issue. Rating of the brood pattern is only relevant during the brood production season. If no brood is present at all, just write "NA" (not applicable).

