



Beginners' Course

2025

Session 3

Equipment

Agenda

Item	Description	Duration
1	Personal Protective Equipment	20 mins
2	The Hive	50 mins
3	Q&A	5 mins
4	Tea Break	15 mins
5	Tools you will need	15 mins
6	Honey Extraction	15 mins
7	The Apiary	15 mins
8	Q&A	10 mins

Housekeeping (For us not the Bees!)



PERSONAL PROTECTIVE EQUIPMENT

Personal Equipment Beesuit



Personal Equipment Gloves



Personal Equipment Boots



Personal Equipment Eyes



Personal Equipment Suppliers

- BB Wear Suits
- OZ Armour Suits
- Swienty Gloves
- Ebay – disposable gloves
- Complete Safety Supplies Boots

Personal Equipment Costs

- Half Suit £53 (Swienty)
- Full Suit £190 (BB Wear)
- 3 layer Full suit £180 (Oz Armour)
- Ultra 3 D suit £430 (BB Wear)
- Blue Latex Gloves £12.80 (Swienty)
- Nappa leather gloves £10.00 (Swienty)
- Disposable nitrile £12.50 per 100
- Boots £16
- Ankle protectors £8.00

Personal Equipment Where to Try?

- The Beekeeping Show
 - 22nd February 2025
 - International Centre Telford
 - £13.50
- BBKA Spring Convention
 - 5th April 2025
 - Harpur Adams Newport Shropshire £6.00

THE HIVE

Hives



Hives -1851

Lorenzo Langstroth 1810-1895

Philadelphia Minister

Invented a moveable frame hive 1851


Patented 1852

Bees leave spaces $>1/4''$ and $<3/8''$

[6.5mm – 9.5mm]

Hives -1941

BURGESS' BEE GOODS
ARE NOTED FOR
BEST QUALITY & WORKMANSHIP



We are the Manufacturers of:—
The Renowned "PERFECTION W.B.C." Hive
The "BUCKFAST ABBEY" Hive
The "WESSEX" Hive
Burgess' GLASS QUILTS & HAIR QUILTS
"IDEAL" Honey Extractor
Honey Ripeners and Strainers
"O.A.C." Strainer
Uncapping Trays
Wax Extractors, etc.

Illustrated Catalogue post free on application

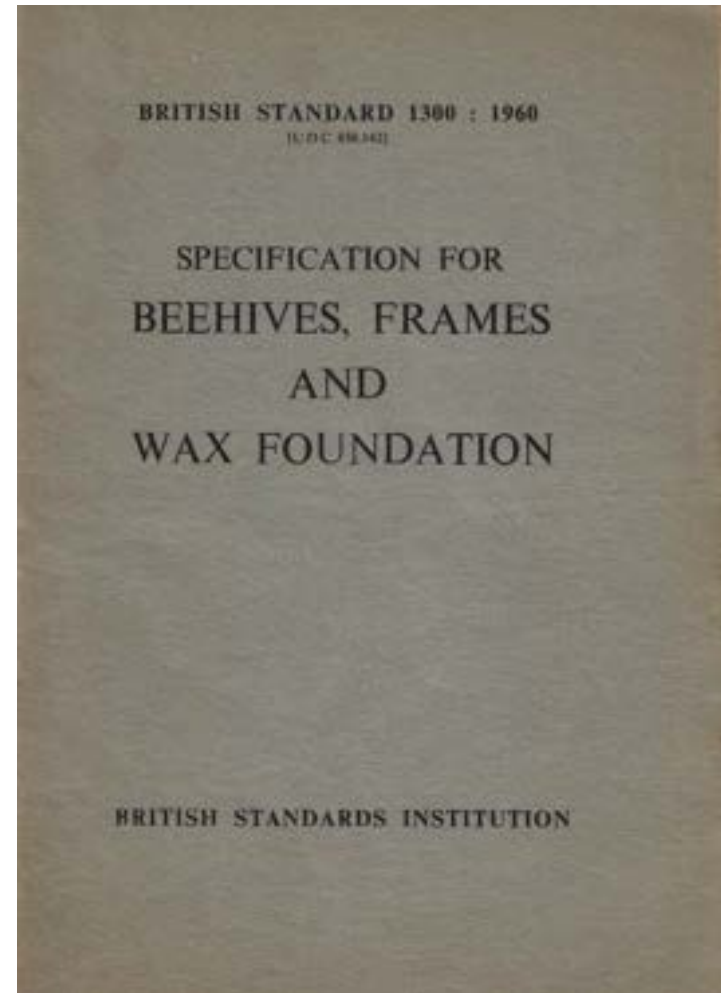
BURGESS & SON
GUINEA STREET . . EXETER

The Glen
Hibernian
Federation
Smith
Cottager
Perfection
Simplicity
Wessex
Buckfast
WBC
Smyth
Cowan
CDW
Wormit

Hives -1946

British Standard
Modified 1960
Withdrawn 1984

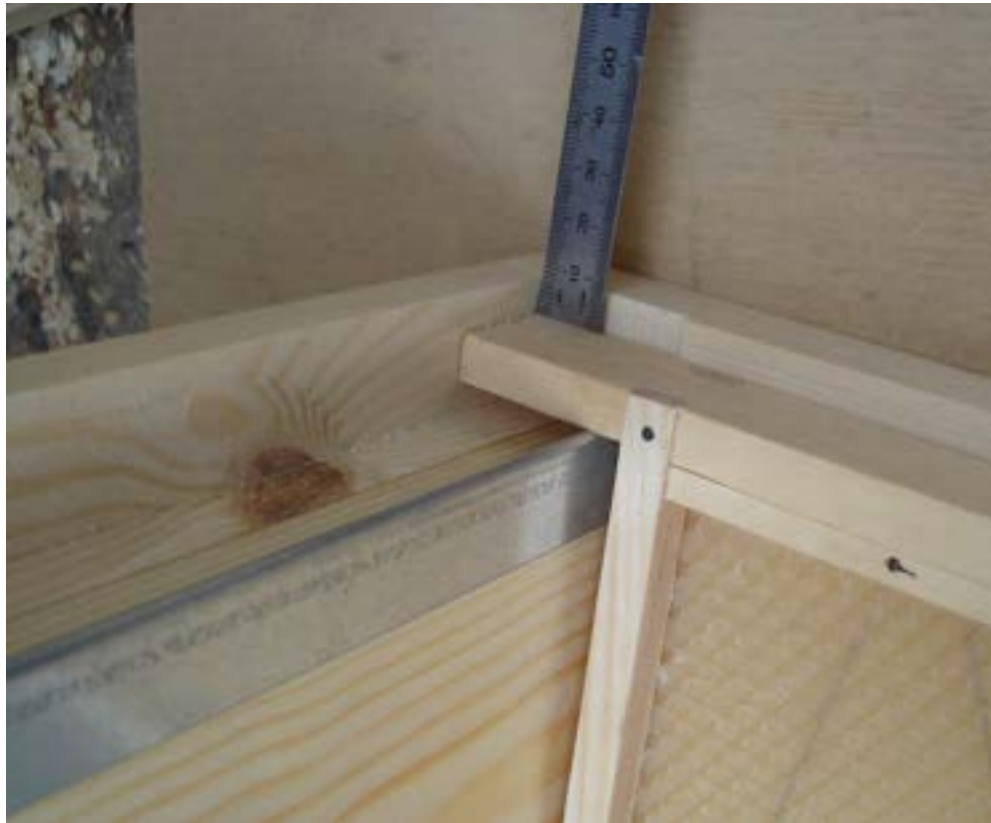
- Modified National
- Modified Commercial
- Smith
- WBC



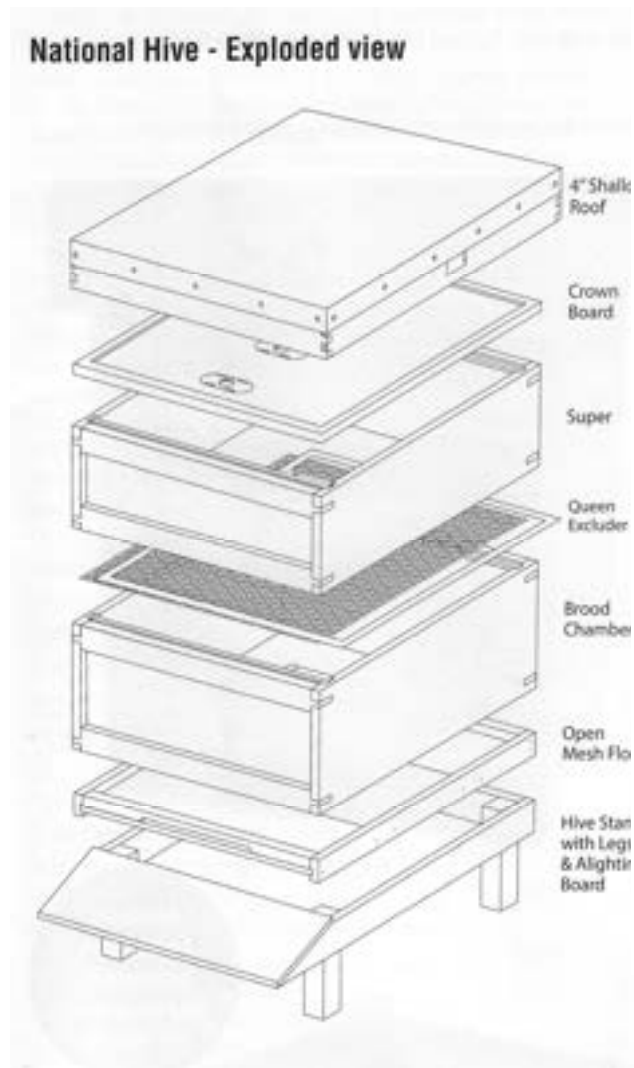
Hives - Comparison

HIVE PATTERN	BOX	EXTERNAL DIMENSIONS (mm)			FRAMES	COMB AREA (M ²)	NATIONAL FRAME EQUIVALENT
		L	W	H			
MODIFIED NATIONAL	BB	460	460	225	11	1.41	11
	S	460	460	150		0.85	
WBC	BB	451	408	225	10	1.28	10
	S	451	408	150			
SMITH	BB	463	416	225	11	1.41	11
	S	463	416	150			
MODIFIED COMMERCIAL	BB	465	465	267	11	1.94	15.1
	S	465	465	162			
LANGSTROTH	BB	508	413	243	10	1.76	13.8
	S	508	413	146			
DADANT	BB	508	470	298	11	2.45	19.1
	S	508	470	168			

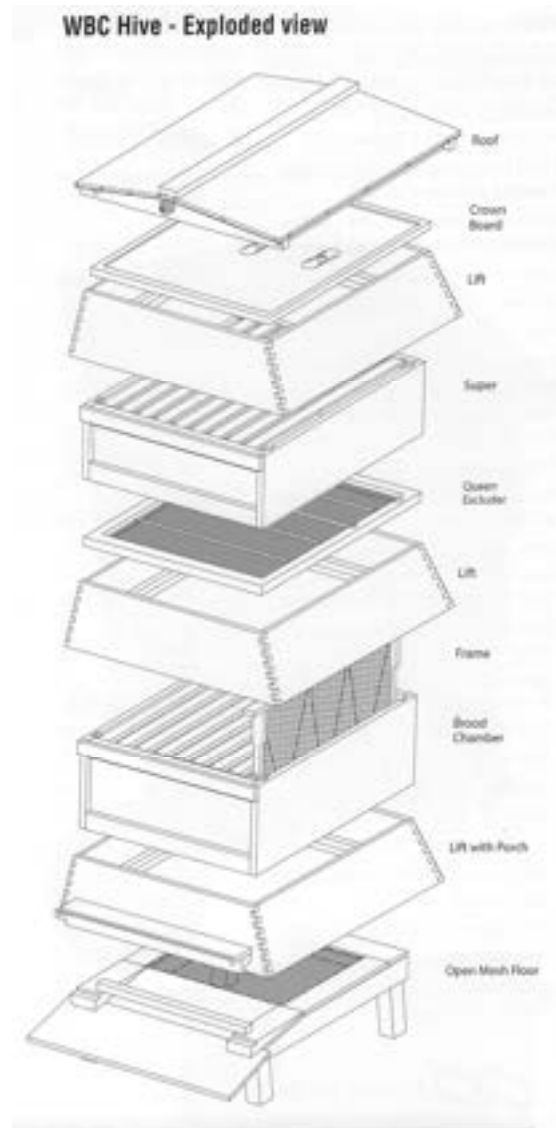
Hives – Where is the Bee Space?



Hives



Hives



Hives



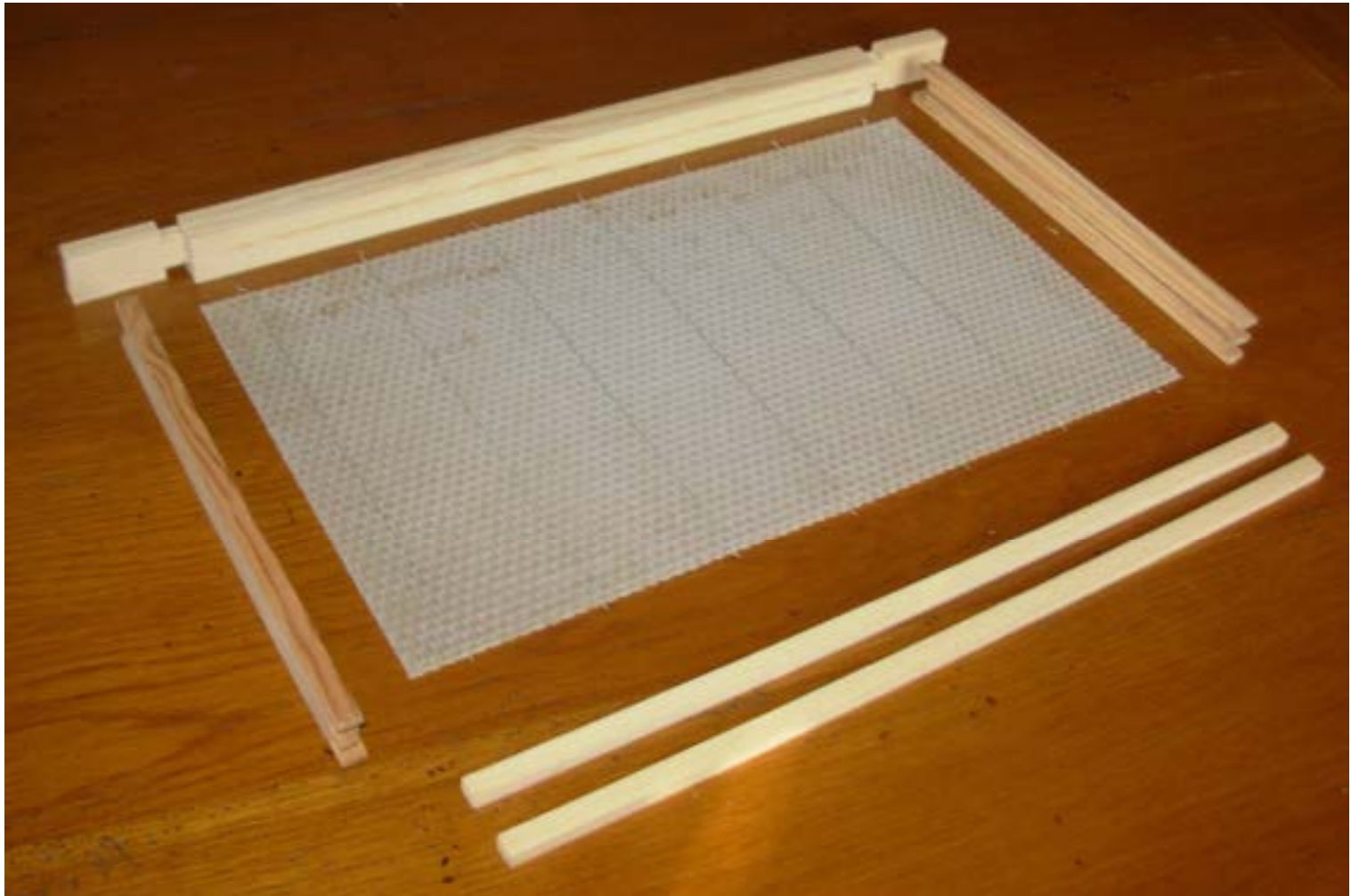
Smith



Commercial

Hives-frames and spacing

DN1



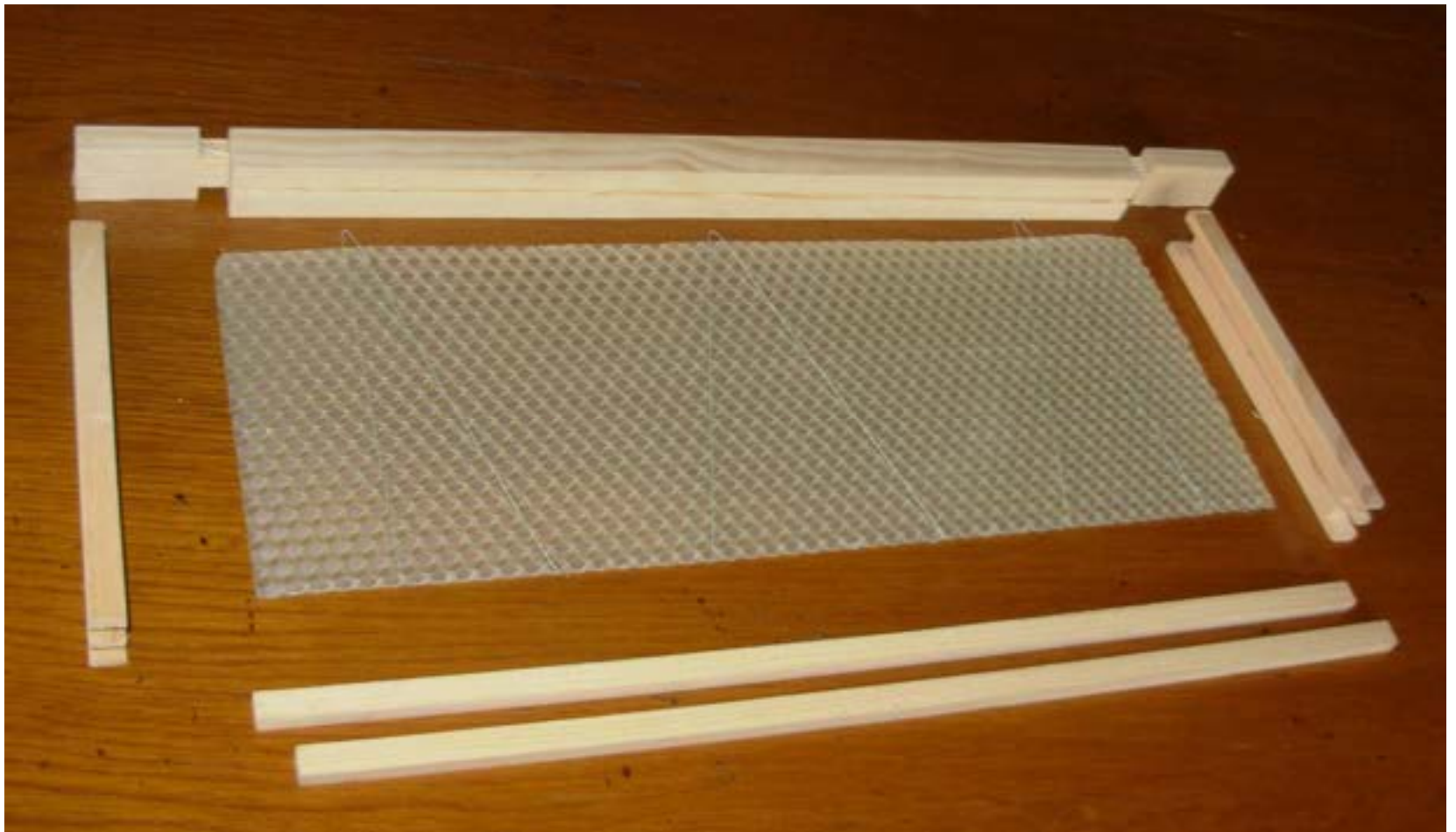
Hives-frames and spacing

DN4

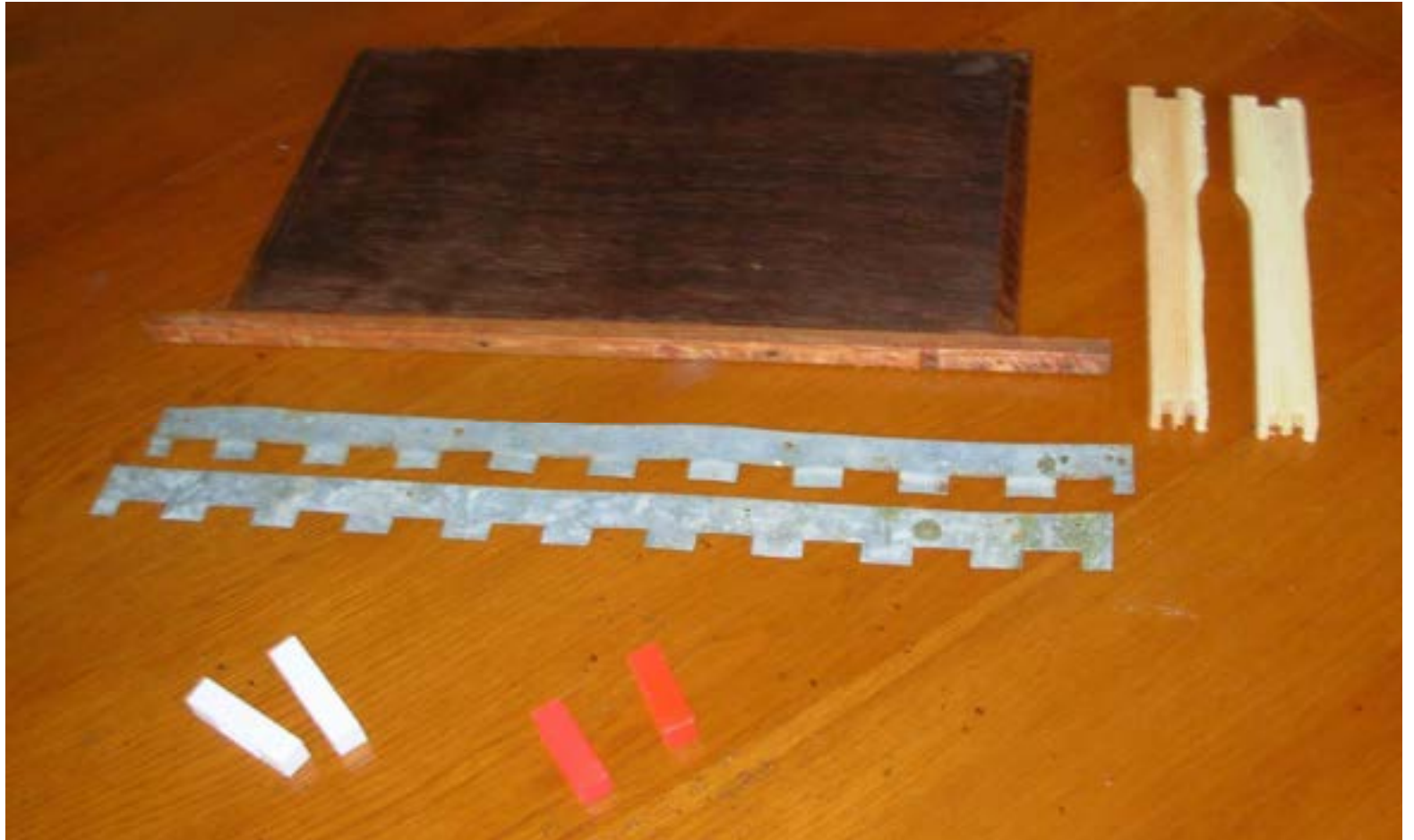


Hives-frames and spacing

SN1



Hives-frames and spacing



Hives-frames and spacing

Narrow plastic ends x 11 = 407mm

DN4 x 11 = 382mm - 384mm

Inside National = 420mm

So DN4 has 38mm of space in which bees will build brace comb

Hives Why Supers?

Sample of 50 supers

Average weight before extraction=19.3Kg

Heaviest Super = 23Kg

Average Weight after extraction = 5.9Kg

Average honey yield per super = 13.4Kg

Brood box full of honey = 34Kg

Hives



Hives

Stands should
be strong and
level



Hives – What are they made from?

Ply Wood

UK Western
Red Cedar

Pine

Canadian
Western Red
Cedar

High Density
Polystyrene

Better



Hives – How are they protected



Hives – How are they protected

Timber external surfaces

- Screwfix no nonsense wood treatment
- Roxil wood protection cream
- Cuprinol garden shades
- Protek stable coat
- Protek royal exterior stain
- Protek royal exterior paint

H.D. Polystyrene – Sandtex Masonry paint

Hives

Buy New assembled

Buy New flat pack

Buy new “seconds”

Buy “pre-loved” – How to clean*

Make your Own – some tools and skill Required

*NBU “Hive Cleaning and Sterilisation”

Hives Suppliers

- Caddon Hives
- Thornes
- Maisemore

Building your own

- Bee-hive bits

Hives Costs

Canadian Cedar Flat Packed 3 supers
QE no frames or foundation

- National £223
- WBC £428
- Smith £232
- Pine National £144
- HD Polystyrene National £234 - £250

Hives Costs

National Canadian Cedar Assembled
with 3 supers QE no frames or foundation

- Thornes £484
- Maisemore £475
- Caddon £303

It pays to shop around !

Hives Costs - Frames

DN1	£3.58	each
DN4	£3.87	each
SN1	£2.92	each

Hive Full of frames £136-£139

Pre Loved Kit



Lincolnshire Beekeepers Annual Auction
Lincolnshire Show Ground
12th April 2025 Starts 10:30am
Entrance £1 >1000 lots

Hives – History repeats itself

Layens

Centenary

Smart Bee Box

Dartington Long Hive

Westley

Beehaus

Flow Hive

Warre

Top-Bar Hive

Hedgecoe Hive

Drayton

Rose OSB

Q&A



or email: nbkatrainingeducation@gmail.com if
you have questions after we've finished

COFFEE/ TEA BREAK



TOOLS YOU WILL NEED

Tools you will need



Tools you will need

Fuel
Rotten wood
Cotton fibre
Peanut shells
Cardboard
Wood pellets
Planer shavings



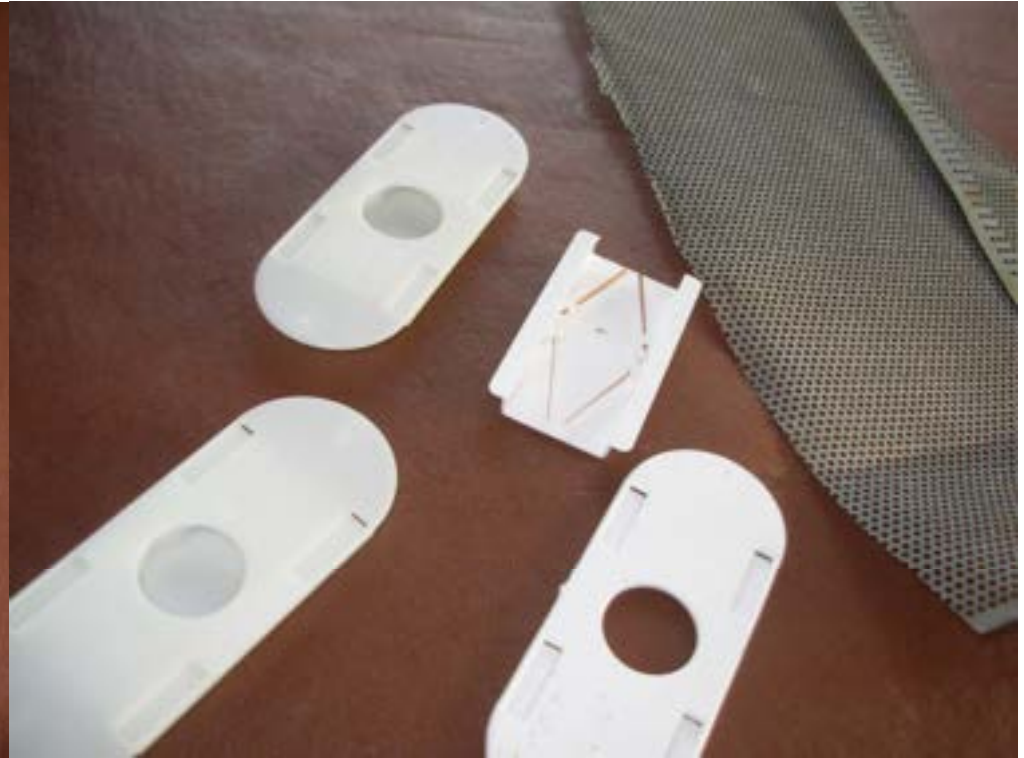
Tools you will need



Tools you will need



Tools you will need



Tools you will need



HONEY EXTRACTION

Honey extraction

10 litre white
tamper evident plastic
Bucket with lid



Honey extraction

Uncapping



Honey extraction

First Year

bread knife
roasting tin
sieve



Honey extraction

Tangential



Honey extraction

Radial

First year
Hire one
Mentor?



Honey extraction

Filtering



Honey extraction

Settling Tank
25 – 30 litre
with tap



Honey extraction

First Year I got some
honey



Q&A



or email: nbkatrainingeducation@gmail.com if
you have questions after we've finished