



### The Bees' requirements for an ideal home

- Cavity of right size about 40 litres
- Cavity weatherproof
- Easily protected entrance
- Space to expand into
- **Entrance allowing ventilation**
- At height away from predators



### The Beekeeper's requirements for maintaining the Bees nest

- Suitable container preferably wood
- Encourage colony to build honeycomb within confines of a frame
- Frames tended to maintain bee space around frame sides and top and bottom of chamber
- Work with the bees to compliment their hard work

# Types of hive Framed Unframed Vertical National (&deep) WBC Smith Commercial Dadant Langstroth Horizontal Dartington Horizontal National Top Bar

### **Common Hives in the UK**







### **Hive Components**



### **Rev Lorenzo Lorraine Langstroth**

- **■** American Congregational Minister
- **■** Identified bee space
- In 1851 designed first modern moveable framed hive

### The Bee Space

- Bees maintain gap between honeycombs
- Just enough space to allow bees to walk through
- Big enough for bees to work back to back
- Too small filled with propolis
- Too large filled with brace comb

# Top Bee Space or Bottom Bee Space? Frame runners Top Bee Space Frame runners Top Bee Space Wou can't mix top and bottom bee space brood or super boxes

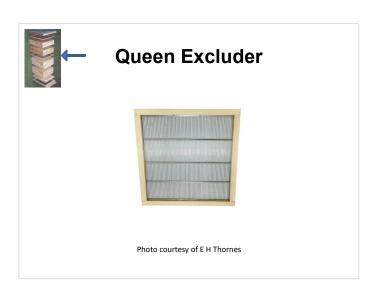
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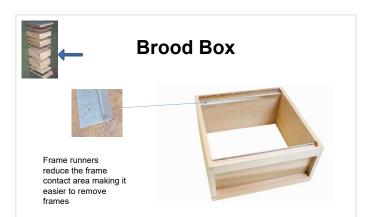
### Supers

- Designed to be stacked vertically
- Shallower than brood box weighs 15 Kgs plus when full of Honey
- Supers can be used for cut comb
- Following extraction of Honey empty frames can be returned, in the super, for refilling or bees to clean out

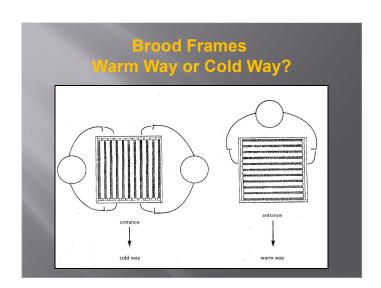
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### Frame with correct position of pins



### **Frames and Nomenclature**

**British Standard Frames** 

	Straight Sided	Hoffman self- spacing
DN – Deep	DN1 – $7/8$ " top bar	DN4 - 7/8" top bar
National	DN2 – 1 $^{1}/_{16}$ " top bar	DN5 - 1 1/ <sub>16</sub> " top bar
SN- Super	SN1 – 7/8" top bar	SN4 - 7/8" top bar
National	SN2 – 1 ¹/ <sub>16</sub> " top bar	SN5 - 1 <sup>1</sup> / <sub>16</sub> " top bar

- •These frames will fit:
  - National Brood and Super
  - WBC Brood and Super
- •The wider top bar is said to stop brace comb being built
- •Most other hives have unique frame sizes

**Clothing & Equipment** 

# **Essentials** • Firstly you will need a protective suit and wellingtons. Bees do not tend to go down Bees can sting through many of the suits available but just wear thick jeans and shirt underneath! Do not wear tight fitting trousers. • Gloves to protect your hands. Leather gloves are no longer recommended. Thin surgical gloves or more protective 'washing up' gloves are more easily cleaned! • **Smoker** to calm the bees when you open the hive. Fuel and lighter for the smoker. • **Hive tool** to prize open the hive components.

Drawing PinsSoft brushButler Cage

Marking fluid

Porter Bee Escape
 Uncapping Tool

Queen Marking Cages
