


# Setting up a workshop

- **Paul: Evolving workshop needs**
- **Neville: Setting up a small workshop**
- **Paul: Setting up a medium-sized workshop**
- **Both will deal with machines in the absence of Frans Gericke**

# **Evolving workshop needs**

- **Interest in woodwork for 70 years**
- **Woodwork at school up to Gr 10 (Std 8)**
- **Father, grandfather had workshops**

<b>Period</b>	<b>Tools</b>	<b>Workshop</b>
<b>1950's</b>	<b>Hand tools</b>	<b>School, Father's</b>
<b>1960's</b>	<b>+Millers Falls Combination</b>	<b>Single garage+car</b>
<b>1970's</b>	<b>+RAS, planer-thick</b>	<b>Dble garage+2 car</b>
<b>1980's</b>	<b>+Router, dust collect</b>	<b>Dble garage+2 car</b>
<b>1990's</b>	<b>Saw+guide rail</b>	<b>Dble garage+2 car</b>
<b>2000-</b>	<b>WAP, P-T, Ducting, T-S, lathe, hand tools</b>	<b>Dble garage+</b> 

# **Evolving workshop needs: Conclusions**

- **Workshops change over time and are not static**
- **Interests and requirements change**
- **Time available for woodworking changes with time eg retirement**
- **Equipment developments over time**
- **Provision for flexibility**
- **Workshop make-overs**

# Setting up a medium-sized workshop

- **Requirements**
- **Basic factors**
- **Machinery**
- **Information sources**

# Requirements

- **Medium-sized-Double garage 40 m<sup>2</sup>**
- **What is needed in a medium-sized workshop?**
- **Layout?**
- **Hobbyist/commercial?**
- **What do you want to make? Large/small**
- **Hand tools + power tools + machinery**

# Basic factors

- **No right/wrong-personal preference**
- **Available space (never enough!)**
- **Location (noise/dust)**
- **Access-material & machines**
- **Flexibility (needs and priorities change)**
- **Support systems -structure, light, floor, ceiling etc**
- **Machinery**
- **Layout**
- **Safety and security**
- **Cost factors**

# Space

- **Dedicated or multi use?**
- **Ability to move items**
- **Make provision for the storage of materials, tools, assembly**



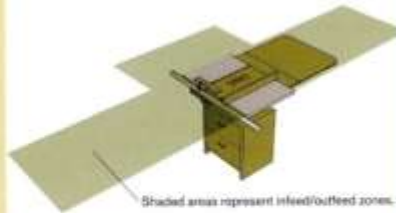
# Layout

- **Workflow-wood preparation-jointing/assembly-finishing**
- **Workshop triangle-Workbench-tools-assembly area (Bench freestanding?)**
- **Select orientation of large “machines” (bench, table saw, bandsaw, planer/thicknesser)**
- **Planning layout-plans, models, literature examples**

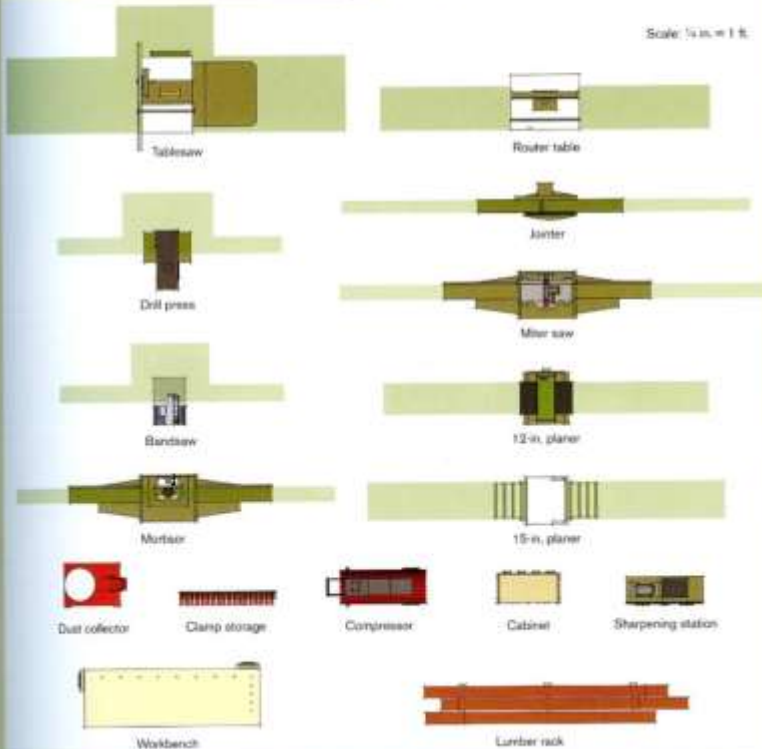
# Layout & Space

## Use These Templates to Arrange Your Shop

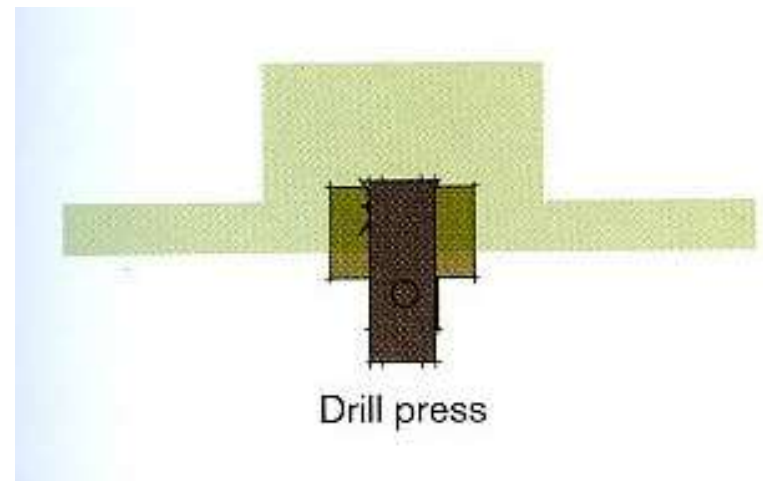
Start by laying out your shop 1/24 scale (or 1/8 in. equals 1 ft.), which should work well on graph paper with a 1/4 in. grid. Then photocopy these models of common shop fixtures, enlarging them 200 percent (or from 1/48 scale to 1/24). When cutting them out to arrange them in paper, be sure to include the infeed and outfeed zones. Note that slight adjustments to adjacent fixtures can bring work surfaces to the same height, allowing them to share space for infeed/outfeed.



Scale: 1/4 in. = 1 ft.



Some machines can be against a wall



# **Support systems: Structure**

- **Ceiling & walls-white if possible**
- **Lighting- Natural/artificial (LED)**
- **Ventilation**
- **Floor-level & smooth (Smooth & patch)**
- **Access doors-wide**
- **Security**
- **Electricity (1 or 3 phase), multiple users?**
- **Safety**

# Machinery

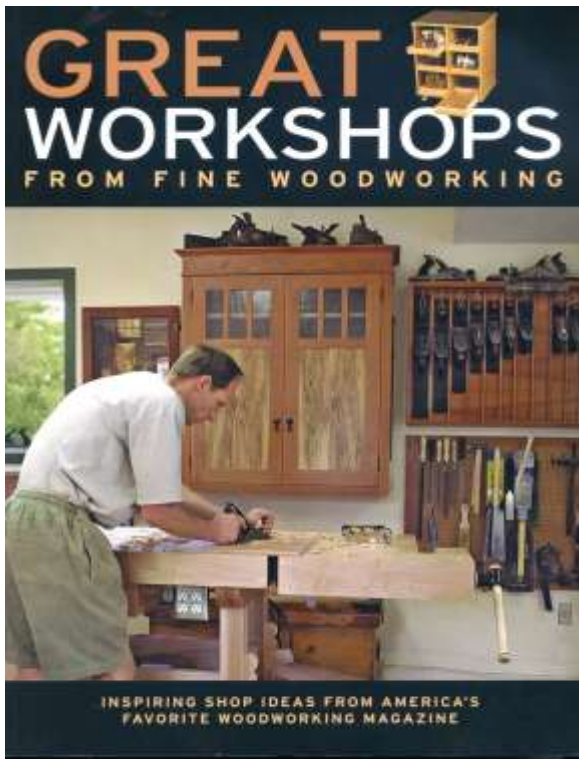
- Selection depends on project types
- Dedicated machines rather than combinations if possible
- Consider outsourcing some items eg panel sawing and edging-planing?
- WAP sharing of equipment eg Lowboy Group Project
- New/used machinery

# Dust collection

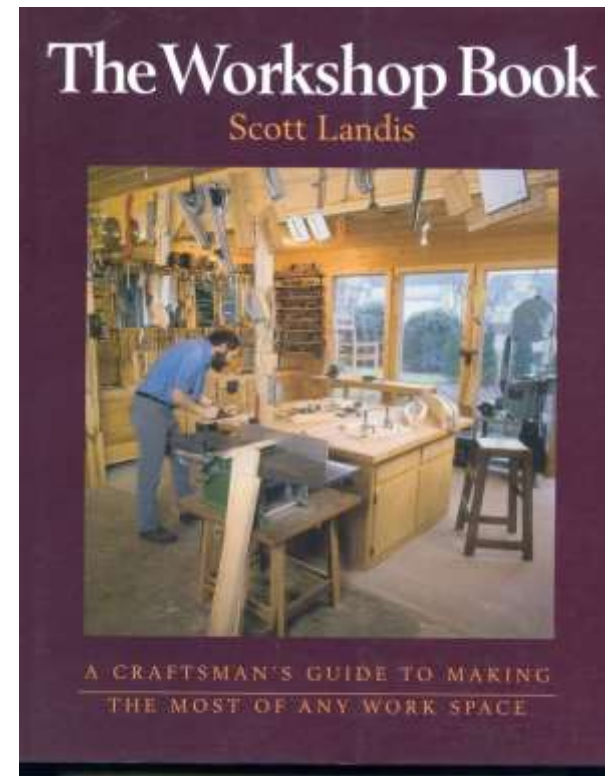
- **Match dust collection capacity with machines (planer-thicknesser)**
- **Stand-alone vs ducted collection**
- **Calculations**
- **Power tools eg sanders-vacuum systems**

# Information sources

- Literature
- Internet
- WAP- Visit workshops and discuss



WAP CM&R 14.7.2018



# Bench & tool storage



# Assembly facility

- Flat surface with ability for easy clamping



**Slab size 600 x 1400**  
**Melamine sheet when glueing**



# **How I would do it again!**

- **Buy a bandsaw, drill press and air compressor earlier**
- **Build a flat bench earlier**
- **Gather more info from WAP members**
- **Dust collector-detailed calculations**
- **Greater emphasis on hand tools (safety, dust, cost)**
- **Layout of your workshop is a project in itself and is challenging and rewarding**