

Woodcarving Basics I

An Introduction and Guide for new members and visitors to the Club who are thinking of joining and are desirous of learning some basic woodcarving techniques and skills.

{This booklet was compiled by Sculptors & Carvers Club Secretary, Frank Witcombe}

Our Club name infers that our members are Sculptors and Woodcarvers. To some extent this is true, as **Sculpture**, particularly depicting life-like facsimiles of anatomical figures and busts, is often very much a part of **Woodcarving** when wood is used as a medium. One of our most experienced members is quite proficient in using other mediums such as stone, bone, soft metals and some synthetic materials - in various sculpted forms. So, perhaps there is not very much separating one from the other – i.e. whether, at any given time, we are performing as a **Sculptor** or as a **Carver!**

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Types of Woodcarving:

There are 2 basic types of woodcarving: **Relief** and **In -The -Round**.

RELIEF: There are three recognized categories of **Relief – High, Medium and Low** (or *Bas relief*). Very low relief often is called '*Intaglio*' or '*Incised*' relief (where none of the surrounding field is removed – referred to as 'Grounding-out'). Sometimes two or all three forms are used in the same carving piece or picture. In this format you are attempting to carve a representational picture, semi-three dimensional from a two-dimensional image – being a drawing or photograph. Therefore, you will have to learn to utilize many techniques, not the least of which are things such as – **Fore-shortening** and **Perspective**. The idea is to create 'light' and 'shadow' effects.

IN- THE- ROUND (3-D): Free-standing sculptures and carvings include Busts, full anatomical figures of people, animals etc. . You could even try your hand at **Abstract** and **Free-form or highly Stylized** sculptures in wood.

The Newcomer will be introduced to some **Starter Kits** and **Basic Projects** where basic skills and techniques will be utilized. Before attempting these, however, some knowledge of what you need in terms of **Tools** and **Equipment**, how to **sharpen** them and types of **Carver-friendly Timber**, should be acquired.

TOOLS & EQUIPMENT:

The availability and choice of carving chisels, gouges and ancillary equipment has never been better. **Carba-Tec** and **MacWood** are the chief retailers, in this State, of carving tools and woodworking equipment. The most popular and probably the best brands are: **Pfeil**, **Flexcut** and **Dastra**. What you must aim for is steel quality, i.e. the ability of the tool to 'hold an edge'. For example, Pfeil, a Swiss manufacturer, are very well known in the woodcarving world; they boast that their tools are from "*Chrome vanadium and steel alloy, made to Pfeil specifications combining outstanding elasticity with unsurpassed edge holding*".

To make the whole issue even more confusing, there are many different bevel /cutting-edge profiles, sizes and classification configurations to get your head around.

N.B...... The most common tool classification method, used by Pfeil and other makers, employs a double numbering system; whereby the first number indicates the Profile of the cutting-edge curvature whereas the second number indicates the width of the tool's cutting-edge – in millimetres (mm).

Tools are best kept in a canvas roll or bag with holding pockets or straps for individual tools. Some carvers even have home-made cantilever boxes (consider customizing a ready-made fishing tackle-box). You could use clips or compartmentalized devices to hold the tools. It is essential that the tools be secured in order to prevent them from knocking together and thus ruining the

bevelled cutting-edges that should always be kept extremely sharp.

Before you rush out and buy an expensive set of tools, try our Club's set of gouges which are always available for use during workshop meetings. They cannot be taken home, though.

The principal gouges/chisels are numbered 1 to 11 – the higher the number the deeper the curvature profile. A typical Starter-Set of gouges, would ideally include the following:-

Tool No.	Size Profile	Classification
3	20mm	3/20
5	20mm	5/20
7 (5 of these)	6,10,14,18 & 25mm	- 7/6 – 25
11	10 & 18mm	11/10 & 11/18
12V	10mm (V or Parting Tool	12V/10

If finances permit, a Skew Chisel or 1/S oblique) of 5mm size – with a 2-sided profile could be added; as could other variations and sizes of Nos. 3 & 5 and perhaps another variation of the 12V tool. As you gain skill so will your requirements to add to your tool collection.

Other specialist tools are also available, such as:- Palm tools, Miniature tools, Fish-tail Nos. 1 – 3 (ideal for grounding out in restricted space), Back-bent tools and many more.

There are Riffler-files, Fine Rasps, and a huge range of sanding accessories,

not to mention the Dremel (power-engraving tool) with its host of cutting, grinding, polishing, sanding accessories – great for texturing surfaces, also! You can even make your own scrapers, by grinding old hack-saw blades into a variety of shapes and configurations. With hand-sanding, you can also improvise by wrapping around dowels or other shaped pieces of wood to get into those awkward places.

A suitable weighted Mallet, is very handy to assist in working with harder or denser timbers. Ask a friendly Wood-turner to turn one up for you, ideally out of a heavy hardwood such as Olive, Lignum Vitae, and Oak or even Mulga or Blackwood. The Author (a former woodturner) has made a number of custom-made mallets for fellow-carvers.

Oil-stones and Slips, Arkansas Stones, a Leather Strop (loaded with Jeweller's Rouge or special grinding compound, are also essential for sharpening and honing.

TOOL SHARPENING:

Oil stones are suitable for honing chisels and gouges. A slip of suitable shape is necessary for finishing the inside of gouges and parting-tools. Grinding should rarely be necessary unless the cutting-edge is chipped through careless handling or having been applied to a very hard, inappropriate timber.

Gouges or chisels are sharpened by holding the gouge on the same angle as the grinding facet and moving it in a circular motion over the oil stone so that the full width of the gouge or chisel is honed evenly – rocking the gouge from side to side until a wire edge is raised on the inside. This wire edge is removed with the appropriate slip stone which is rubbed up the inside whilst being held on a slight angle so that a small bevel is put on the inside of the gouge. This bevel helps turn up the chips when used. The gouge is then stropped on a leather strop in order to bring up a keen edge.

The V-chisel or Parting-tool is a little more difficult to hone. Hone each side of the chisel the same as a flat chisel, holding it at the same angle as the gouge, then while lifting the angle slightly, hone the corner or point; this will remove the spur which often forms in the bottom of the ‘V’. The wire edge is removed as described above and then stropped.

TIMBER: (Carver-Friendly)

There are a number of *Classic* carving timbers which all share common characteristics. While consisting of hardwood with dense grain, they are not overly heavy in weight and texture and/or brittle. They do not possess overpowering or distracting grain or figure and cut/carve easily without splintering or cracking. These *Classic* Timbers might include: - **English Lime (Tilia vulgaris), Huon Pine, many types of Cedar, including Cedar of Lebanon, Teak, Mahogany, Rosewood, Brazilian Red Cedar and Jelutong.**

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Other types of Timber that, from experience, I have found to have excellent carving qualities, are:-

Oak (although some of this can prove to be very hard), **Cypress Pine, Meranti** (the lighter in colour strains of this timber are too soft – try and find dark coloured Meranti – get a good piece and it will carve like Mahogany!). Many fruit woods – e.g. **Apricot, Apple and Pear, also Cherry** (some **Native Cherry** is even better), Carob – the synthetic chocolate tree - (I find this to be excellent and it has a wonderful red or deep pink heartwood); **Camphor Laurel** is good to carve but, like some other woods, can have very distracting grain and figure stripes and colourations (very attractive for woodturnings, but not always suitable for carved items). Air-drying fruit woods – from green stock – can sometimes prove difficult, without it cracking up while drying out. Try and remember to seal the end-grain to prevent this happening.

STARTING UP:-

In this section I want to help you put all that reading and research into practice. Let’s get *down and dirty* and play with some wood by way of **Starter Kits and Basic Projects.**

Ultimately you will attempt your first Project. Your carving will usually be a **Relief** (panel) carving, or something three-dimensional or ‘**In the Round**’. It may be a piece of **furniture**, or part thereof. It may be that you wish to carve on a piece already **turned or partially turned on a wood-lathe**. There may even come a time when

you wish to carve – ‘soften the edges’ of a **fret-work or scroll-sawn** project.

The carving project may also combine **Marquetry, Inlay** work (exotic contrasting coloured timbers and other materials such as **silver, gold, gemstones, mother-of-pearl** etc. etc.). Your carving may even stray into the field of **Intarsia**.

To get you started, before you become too ambitious and maybe waste valuable materials, our Club has a number of Starter Kits and Projects available for Novice Carvers to try.

Some of these Kits are designed to have a flanged ‘Back-Board’ or ‘Mounting Board’ to which the prepared carving blank is secured by means of ‘Hot-melt Glue’.

The attached flange (if attached) or mounting board is held in the workbench vice. You can also use ‘C’-clamps or Hold-downs or protective *non-slip material* on to which the work-piece is placed. Whatever you use, always make sure the work-piece is held securely. You are working with sharp tools and therefore, SAFETY is paramount!

Worksheets, which are relevant and pertain to the particular Starter Kit or Project, will also be made available. Each Worksheet will outline your *plan of attack* and include details such as: **Which tools to use; How to go about carving it and Techniques and Tips.**

**STARTER KIT *Classic Acanthus
Leaves & Scrolls***

PROJECT (1) *Kissing Dolphins*

PROJECT (2) *'Flower'*

PROJECT (3) *'Fish – in relief'*

Other small and relatively easy Projects to attempt are a range of ***Fridge Magnets*** – these may include recognised patterns of Angels, Butterflies, Drummer Boy. You can even design your own or borrow some from 2-dimensional drawings or photographs.

It will become obvious that some of these objects have been prepared by band-sawing or scroll-sawing them out first. Depending on the type of project, this type of preparation is necessary, to quickly remove waste wood.

Design your own or use publicized patterns, borrow others work with permission (but be careful about Copyright restrictions). What to carve? Will the carving be in Relief or In-the-Round?

Here are a few ideas. You can carve the following:-

Furniture, Embellish turned items with decorative edges and/or motifs, Wall Panels, Friezes and Screens, copies of Artworks, Carve decorative scenes, flowers with foliage and vines; carve on music and jewellery box panels and lids. Add your 'own personal touch' to make many items unique and original.

Find appropriate 2-Dimensional Photos, pictures, drawings – make them 'come to life' – 2D becoming 3D. You could try, carving on wood- turned items to embellish them. The list is endless.

TECHNIQUE: Study others; if possible lean on an experienced carver as a Mentor. You can later modify a few things, add your own ideas and flair and, just maybe, you might develop your own technique – but when you start- out, stick to the basics!

When using your gouges, match the profile of the tool cutting-edge to the design-outline; Draw your design on to the timber-blank using graphite tracing-paper or carbon paper and then ***ground-out*** (the removal of the field surrounding the salient feature/s). To save time you may use a Router, paying particular attention to various depths of appropriate planes, but also be careful to leave a safe margin laterally around your subjects you want to stand-out in relief. Remember, if you take off too much you can't put it back!

Think about *Perspective*, Catching the poignant *'Moment'* or subtle nuance – particularly in human subjects; or capture that *typical uniqueness of movement and posture, liquidity of form* – of animals & reptiles.

Whatever the carving – try and make it *'live and breathe'*.

**Always try to achieve that
*WOW-FACTOR !***

i.e. that mysterious quality that is not only an accurate and authentic representation of the original theme or idea, but also that which makes your carving truly great and unique.

