# Bushcraft - Spoon Carving.

Leigh Robinson

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## *Dedication*

To Kerrie, for enduring sawdust and shavings throughout the home for too long.

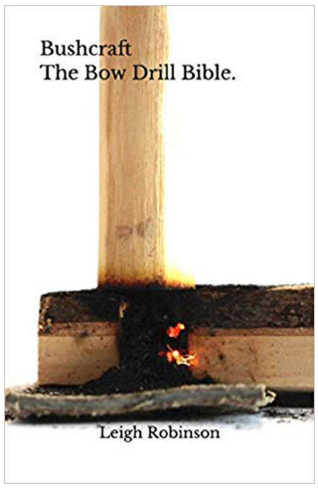
## *Acknowledgements*

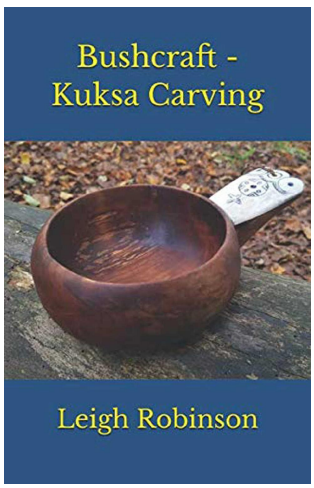
To my friends and other spoon carvers who sparked my interest in green woodworking and spoon carving.

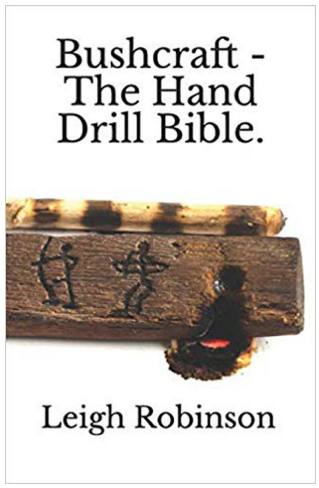
## *A request*

Please can you submit a customer review on Amazon or any other channel you bought the book. Reviews help encourage others to see that spoon carving isn't impossible, it's fun and everyone can do it.

## Other books by Leigh Robinson



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First Published 2019 by Kindle Direct Publishing.



ISBN: 9781071215579

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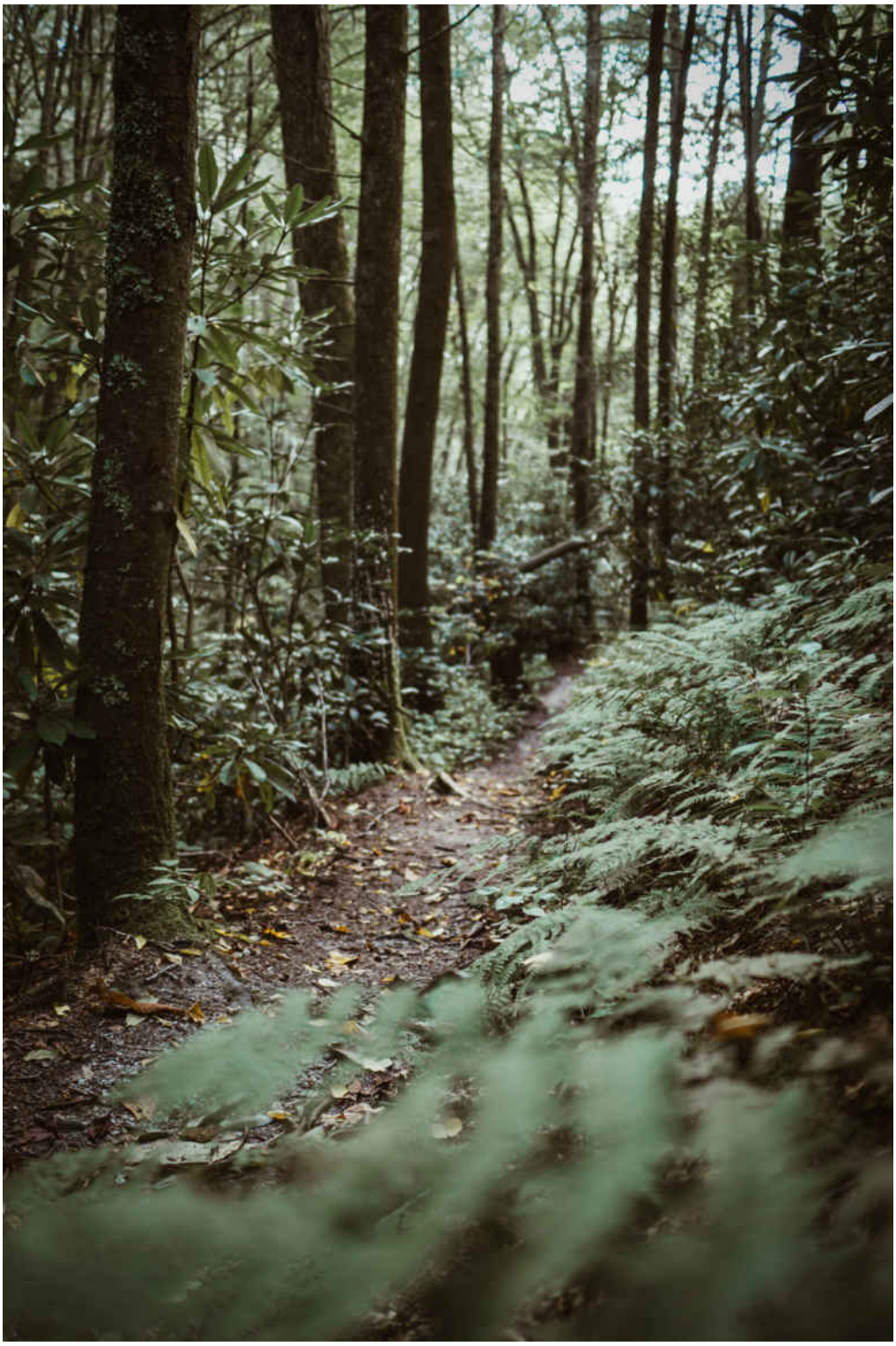


# Preface

I avoided spoon carving for years. It just didn't interest me. It seemed like a slow and very boring thing to do. A huge amount of work just to produce a wooden spoon when metal spoons are incredibly cheap and readily available. It didn't make sense. Then I attended a week long bushcraft course which included spoon carving. We were shown how to carve a spoon and were expected to work on it ourselves during the week and produce something at the end as part of the exam. At the end of the week I had a very crude looking spoon that was unusable.

*Possibly the ugliest first spoon ever made!*

After the course the spoon stayed in a drawer at home for well over a year until I decided to finish it. I was happily carving away at the bowl until I saw daylight poking through. My spoon had now become a pasta strainer! I had carved too much wood out of the bowl and gone right through, ruining the spoon. That was the end of my spoon carving career.

I could carve anything I needed in camp including tent pegs, bow drills and pot hangers so that was good enough for me. Later I was with two friends who are spoon carvers. They were talking about end grain, spalting, oil finishes and lots more which I really didn't understand. It made me realise that I actually understood very little about wood and its properties and I was limiting my skills in bushcraft. I needed to learn how to carve spoons to progress my skills and knowledge. I asked them lots of questions and spent time watching them carve spoons.

I began making my own spoons and quickly realised how difficult it can be. I couldn't keep the spoons symmetrical. You could see the handle was a bit wonky or the bowl was misshapen. Then I was also getting splits and cracks in the wood. It felt like a losing battle. I figured out what I was doing wrong and progressed slowly. If a good, straightforward guide to spoon carving was available my progress would've been much quicker. I've improved a lot and my skills are much better.

I want to give others the confidence to start spoon carving and enjoy it as they develop. I have now put everything I have learned together within this book for anyone who wants to learn how to carve spoons.

# Introduction

This book takes you through the entire process of making a spoon. Starting with choosing your tools, selecting the log, axing out the blank and shaping with the knife. It also includes many templates with exact measurements and guidance to follow along with. The book also covers embellishing your spoons to make them more unique and personal. The final chapters include how to finish the spoon, oiling, use and maintenance.

When you have finished the book and practiced what you have learned, you will be able to go out to the woods, identify suitable spoon carving material and carve a beautiful spoon. I hope this book inspires you to get out there and practice spoon carving, experimenting with new materials and ideas, pushing this skill and wonderful art further than before. Learning spoon carving has given me an immense amount of pleasure and joy and I am grateful for the opportunity to share it with you.

# Spoon History

*The Lion of Chaeronea. Ancient Egyptian wooden spoon with a jackal handle. Ca. 1539 – 1292 BCE from Saqqara.* (1)

Preserved examples of various forms of spoons used by the ancient Egyptians include those composed of ivory, flint, slate and wood; many of them carved with religious symbols. During the Neolithic Ozieri civilisation in Sardinia, ceramic ladles and spoons were already in use. In Shang Dynasty China, Spoons were made of bone. Early bronze spoons in China were designed with a sharp point and may have also been used as cutlery. The spoons of the Greeks and Romans were chiefly made of bronze and silver and the handle usually takes the form of a spike or pointed stem.

In the early Muslim world, spoons were used for eating soup. Medieval spoons for domestic use were commonly made of cow horn or wood, but brass, pewter, and latten spoons appear to have been common in about the 15$^{th}$ century. The full descriptions and entries relating to silver spoons in the inventories of the royal and other households point to their special value and rarity. The earliest English reference appears to be in a will of 1259. In the wardrobe accounts of Edward I for the year 1300 some gold and silver spoons marked with the *fleur-de-lis,* the Paris mark, are mentioned. One of the most interesting medieval spoons is the coronation spoon used in the anointing of the English Sovereign.

*Coronation Spoon late 12th century.*

Earlier English spoon handles terminate in an acorn, plain knob or a diamond; at the end of the 16th century, the baluster and seal ending becomes common, the bowl being fig shaped. During the restoration, the handle becomes broad and flat, the bowl is broad and oval, and the termination is cut into the shape known as the hind's foot.

*A wooden spoon found on board the 16th century carrack Mary Rose.*

In the first quarter of the 18th century, the bowl becomes narrow and elliptical, with a tongue or rat's tail down the back, and the handle is turned up at the end. The modern form, with the tip of the bowl narrower than the base and the rounded end of the handle turned down, came into use about 1760. (2)

Spoons from history can be great inspirations for your own work. It can be really satisfying to recreate a spoon from antiquity and have it as your own to hold.

*Finnish Neolithic Spoons.*

A while back, I stumbled across these Finnish Neolithic spoons whilst looking for shapes and designs. The spoons depict a swan, moose, and a bear. Beautifully and skilfully carved, I had to have one for myself, so I set to the task of carving the moose.

*Original Neolithic moose effigy spoon.*

Once you begin replicating spoons you quickly appreciate how difficult the spoon was to make. You encounter all the same problems the original maker met with and there is an appreciation that you are using modern steel tools when they

had much more basic tools. There can be no greater understanding of a spoon than when you have carved it for yourself.

*Replication of the Neolithic moose spoon. Cherry wood with wood stain.*

I am really happy with how the replica came out. It looks really good and is actually a really useful spoon because of the wide bowl. At some point in the future I'd like to go on and make the other two spoons to complete the set of moose, swan and bear.

A potlatch is a gift-giving feast practiced by Indigenous peoples of the Pacific Northwest Coast of Canada and the United States. I found a beautiful potlatch spoon that had been sold at auction for 600 Canadian Dollars. It had a Raven head handle and I decided to replicate it.

*Northwest Coast Potlatch spoon.*

Keeping to the shape and proportions all proved a challenged but it worked out well in the end.

*Potlatch spoon replica. Ivy wood, wood stain and acrylic paint.*

The problem becomes that you have produced a really nice spoon that is too nice to use. Also, these ‘eccentric’ shapes can feel odd in the hand that is used to a cold, steel regular shaped spoon. It takes a while to get used to them but that is all part of the fun. Use all the resources you can to get inspiration for your carving and to develop and challenge your skills further.

# Tool selection

# Power tools

It is entirely possible to make a spoon in the workshop using power tools. It will probably take about half an hour and this is how some people like to make them. Simply bandsaw out most of the shape. Complete the shaping with chisels and files. Finish on the sanding machine and then oil! It gets the job done quickly and you have a spoon in a very short amount of time. However, you will learn very little about the quality of the wood, how to work with wood grain and few memories will be made. Bushcraft isn’t about power tools.

# Hand tools

I personally prefer using hand tools. I have nothing against power tools, they have their place. When I use hand tools, I get intimate knowledge of every detail of the spoon, I get to know it much more personally and it feels more authentic. A beautiful spoon can be made on a bandsaw, lathe and sander, but they seem too perfect and are missing life. I like to make a spoon with memories. Each spoon that I carve I can tell you where I harvested the wood, what the weather was like whilst I was carving it, who I was with and much more.

Typically, someone will see a spoon and decide they want to make one. They're probably new to carving and need to get some tools. So naturally they want the best to ensure that they'll make something nice with the right tools. This involves spending out for high end tools or buying off whoever is fashionable in the carving world at that time.

The truth is that you are simply removing wood to create a shape. There are easy ways and harder ways to do this. Depending on your tastes and preferences. The easy way is to use the power tools in the workshop, and you'll have a nice spoon in under an hour. The hard way would be using tools of the stone age such as the flint adze. There is a happy medium to be found somewhere in-between and it's your choice to decide! This book is focused on bushcraft skills meaning the bare minimum of hand tools. Focusing on the skill of the traditional craft.

# Axes

"I want to start wood carving, what is the best axe?" is a very common question when starting out. Typically, the answer will be whatever is in fashion this week. Popular brands come and go. Rather unfashionably, there are definite answers that can

help you in choosing what is right. There are many types of axes that are made for many different jobs. When you try to use them for unintended purposes, they become hard work and potentially dangerous.


*The Gränsfors Small Forest Axe (SFA).*

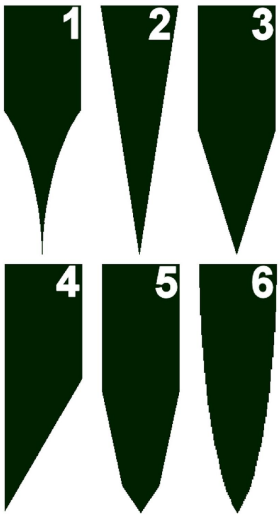
The Gränsfors Small Forest Axe (SFA), sometimes described as the Volvo of axes, is a two-handed axe. It is great for hiking and trekking. A while back I was canoeing and wild camping on a loch surrounded by old Caledonian forest in Scotland; a popular destination evidenced by the multiple fire scars and lack of fire wood. The trees were big, old, and long out-competing the small ones making firewood difficult to find. There were only large logs left that people had been unable to saw through.

The SFA was brilliant at processing these logs into firewood. Without it, we would have been unable to make a fire. The 900g (2lb) weight gave a good punch into the logs backed up by the 49cm handle enabling a good swing. At this size, it can be packed in a rucksack and carried comfortably.

A few years later I was trying to rough out a Kuksa with the SFA. The axe felt heavy and cumbersome. The 900g (2lb)

weight became quickly tiring with use. And the long handle got in the way. It was the only axe I had with me, so I persevered until I swung and hit my kneecap! Luckily it only clipped my knee and a plaster was sufficient. But I was in a remote area and it could have turned out much worse. If I had listened earlier, I would have picked up on the axe giving me warning signs. I put the axe down and a lesson was learned.

General camp axes at around the 900g (2lb) are too heavy for carving. You can split the log for the blank with them. But they're of little use in carving. Their convex grind doesn't work well with precise cuts in green wood.




*6 shapes of ground blades.* (3)

1. Hollow grind. Ground to create a concave, bevelled cutting edge. Yields a very sharp but weak edge.
2. Flat grind. Blade tapers evenly. A lot of metal is removed from the blade and it sacrifices edge durability for sharpness. You will get very clean and precise cuts.
3. Scandinavian grind. Made with strength in mind. Easier to sharpen. Common grind for bushcraft knives.
4. Chisel grind. Come in right and left handed varieties. Common with Japanese culinary knives.

5. Secondary bevel. Sharpness is sacrificed for resilience. Less prone to chipping or rolling than a single bevel.
6. Convex grind. Keeps a lot of metal behind the edge making for a stronger edge while allowing for a good degree of sharpness. A common axe grind.

The design of the axe head is adapted to its area of use. Hardwood demands an axe with a thick bit and a rounded, typically convex grind. Axes with a more pointed, thinner edge are good for cutting softwood and green wood. The straight edge is good for carving with, whereas the rounded edge is good for chopping and splitting.


*Hultafors Classic mini hatchet.*

I currently use a Hultafors Classic mini hatchet. Its 500g (1.1lb) so significantly lighter than the SFA. This means I can work with it much longer before tiring. And the shorter handle gives me much greater control. It has a convex grind making it a great camp axe that can split small, dried firewood. It does an adequate job for carving but is unable to do neat, precise and fine carving that a flat grind axe can offer. This is

overcome by tidying up with knife work. I may at some point regrind the bevel to make it flat.

In comparison, the Gränsfors Small Carving Hatchet comes in even lighter at 300g (0.7lb). It has a flatter grind specific for carving. It's around 50% more expensive than the Hultafors though.

*Gränsfors Small Carving Hatchet.*

One of the most interesting carving specific axes is available from Robin Wood. Currently retailing at £39 (2019 values), The 'Robin Wood Carving Axe' is 720g making it a mid-weight between the SFA and the Hultafors.

*Robin Wood Carving Axe.*

Robin has an outstanding reputation in the craft world. He has won ‘Artisan of the year’ in 2009 and was awarded an MBE in 2014 for services to Heritage Crafts and Skills. I suspect this axe cannot be beaten for price and quality.

I’ve mentioned top end expensive brands with Gränsfors and mid-range brands with Hultafors. You get assurances of a quality axe. If you decide to buy new, a well-known and respected brand guarantees you’ll get it right. Look for a pedigree where they have been selling for many years and are well known.

You can buy obscure branded axes from the local hardware store. Look for axes classed as ‘hatchets’. The quality of the steel, the bevel and balance may be questionable though. Anything other than ‘hatchet’ is likely to be for splitting logs and terrible for carving.

It can really pay off to visit a car boot as you will always find tools for sale. You can pick up a bargain very cheaply and come away with a quality tool. If you are new to axes it could be a challenge though. The bevel may be wrong. There could also be damage requiring repair. A novice axe user may not

see these faults. Or fail to recognise the intended use for the axe.

# Knives


*Mora Clipper knife. The standard student knife for most bushcraft schools.*

You may already own a ‘bushcraft’ knife. People typically start out with something like a Mora Clipper. It’s pretty much the standard student knife for Bushcraft schools. Blade length 104mm, 2.5mm thick. But like axes, there are many types of knives. Each have their own uses. The ‘bushcraft’ size knife makes for a really bad carving knife. It’s big, bulky and the Scandinavian grind acts more like a chisel when the ability to shave is what is needed. It will do the job of carving but will do it badly and dangerously.

*The Mora 106 is a very affordable, quality carving knife.*

The Mora 106 is an excellent carving knife at 82mm length and 2mm thick. Notice how they both have Scandinavian grinds but crucially, the Mora 106 bevel terminates early on the spine and transitions into a fully flat grind. This enables really fine carving. It acts as a razor, shaving the wood. And the 106 is 0.5mm thinner than the clipper. Thin knives are better at shaving wood than thick ones.

There is also something called a sloyd knife. Sloyd is the Swedish name for ‘craft’ so their primary purpose is woodcraft. Any internet search for a wood carving knife or sloyd will bring up some beautiful knives that are perfect for the job. I use a Mora 106 for thinning work, shaping and final cuts.

***“The most valuable things I own are my axe, my wife and my crooked knife.”***

-Blue Coat, a Northern Cree.

*Whale tail Mocotaugen made by Luke McNair.*

# Mocotaugen and crooked knives

These are often referred to as “crooked knife”, since the name mocotaugen pre-dates the early English and French names for them. It is a woodworking knife typically with a curved end and is commonly found amongst the Native Americans of the Great Lakes and Eastern Woodland as well as adopted by non-natives.

The crooked knife is drawn toward the body, with the thumb placed along the bottom of the handle, the hand clenched palm up. The history and use of mocotaugen is beautifully rich and if you are interested in reading more look for a book called ‘*Mocotaugen; The Story and Art of the Crooked knife*’ by Russell and Ned Jalbert.

Mocotaugen are usually seen in birch bark canoe building but they were used for all sorts of wood carving. The Mocotaugen will produce a spoon but you need to adjust your design to accommodate the knife.


*Kestrel Crooked knives are beautiful and versatile tools.*

I use Kestrel type C & E crooked knives. They are tools from the Native Americans of the Northwest coast. The double edge cuts with a draw or a push stroke. The curved tip allows you to hollow out wood or do really fine work. The type C has a shallow curve which can do the bulk of hollowing and reducing the stock wood quickly. The type E gets right into a deep bowl better than type C but is not as good at stock removal.

I've found from using Kestrel crooked knives that push cuts remove large amounts of wood very quickly. You can quickly work a wood blank down much quicker than using a normal knife. If the direction of the grain changes, you can just pull the knife instead of pushing it. There is no need to reposition the wood or change grip on the knife. You can also work up the blade to do finer work and then switch to hollowing the bowl, all with a single knife, making them a joy to work with.

These knives are a completely different way of working though. You need to start slowly and carefully to get used to the new method. Taking thin slivers of wood slowly. Then working up to deeper cuts and increasing the speed. They can easily dig into the wood, get stuck and damage the tip or chip the blade. It's a refined tool that needs a careful hand. I am very nervous about letting people try them out as when they dig into the wood, people naturally try to force them through, breaking the blade. A mindful owner who takes care and looks after them will have no problems or issues.

*Mora Classic Wood Splitting Knife 220.*

# Push and draw knives

These remove stock very quickly, so you'll go from the axed out blank to something ready for finishing cuts pretty quickly. They do not have the ability to hollow out the bowl or do finishing cuts. I prefer using draw knives for bow making which is a much larger project. They're a great green wood working tool.

# Spoon knife

*The Mora 164 is often bought with the 106 as a beginner carving set.*

Mora have a great range of knives however, the Mora 164 is terrible at hollowing out. They come with a secondary bevel and are not sharp. The pointed tip is a menace too! You can reprofile them and remove the tip, but it isn't really worth it. Lots of people, myself included, make the mistake of buying a Mora 106 and the 164 as a beginner carving set. Later realising that the 164 did not do what I needed. If you are after

a spoon knife, buy from a reputable source. Spoon knives offer less versatility than crooked knives and are only used for hollowing out bowl shapes.

*Robin Wood Spoon Knife – Right hand Compound Curve.*

Robin Wood has various spoon knives available. The compound curve knife has a curve that gradually tightens towards the end of the blade which allows you to carve various sized spoons and kuksas. One difference worth mentioning between the mocotaugen, the Northwest coast crooked knives and the spoon knives is their bevel placement.

The Native American knives have their bevel on the inside of the knife. It is flat side of the steel that meets on the wood. The spoon knives have their bevel on the outside, so it is the curved steel that meets the wood. I have noticed that the spoon knives provide less ‘chatter’ on wood compared to Northwest Coast crooked knives. What I mean by ‘chatter’ is that the blade jumps, skips and catches on the wood when you take a shaving. This leaves and unsightly mess that has to be tidied up or sanded over. This doesn’t happen all the time and is only with certain directions of the grain. I suspect maybe my misuse of the Native American tools to be at fault having not been personally trained in them or being a part of their culture. But for me, the spoon knives tend not to chatter and offer a much better finish.

# Twca Cam

*Twca Cam hollowing out the bowl of an eating spoon.*

These are favoured by production carvers for its exceptional balance of power and control. This traditional tool is crucial for many aspects of love-spoon carving. Twca cam is (pronounced took'-ur-cam). They hollow out the bowl of a Kuksa or spoon beautifully and can be used for finishing without the need for sanding. But they only do one job, hollowing out. If you are hiking, you have to make the decision whether it is worth carrying the extra weight and losing the pack space. But if you aren't going far and want the job done right, they are excellent.

I find they can be a bit too large for eating spoons when you want work small areas and way too large for anything smaller than an eating spoon. But if you want to reduce wood quickly and precisely, they are hard to beat.

# Chisels, Gouges and files.

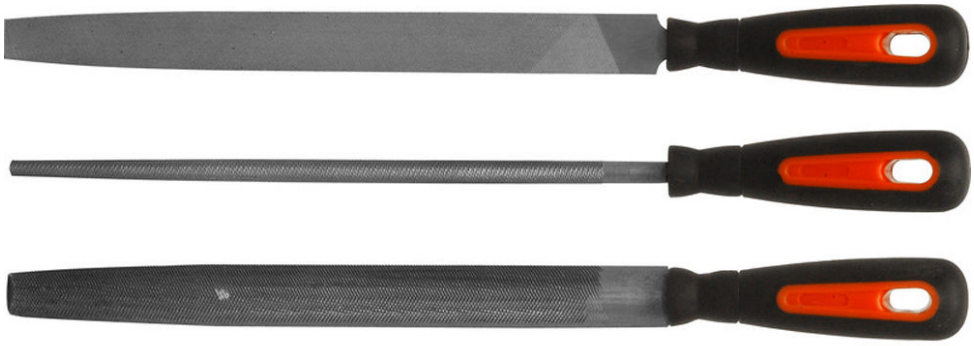
All of the tools mentioned previously are almost exclusively green wood working tools. That means they are best with freshly cut wood that hasn't lost its moisture content. Green wood cuts much easier than seasoned wood. You may have a problem getting your hands on freshly cut green wood or be limited to a few species to work with. If you buy seasoned dry wood, you'll have a limitless choice of wood to work with that opens you up to all sorts of interesting colours and textures. The problem with dry wood is that it will render most of your green woodworking tools useless. The wood will be too tough to cut with a knife unless it is soft when dry. This is where chisels, gouges and files are used.

*Spoon gouges are really efficient at removing bowls in spoons.*

Spoon gouges the quickest and easiest way to remove the bowl material. Straight gouge chisels will shape the spoon and curved ones will get the bowl shape defined. They're good with green wood and are essential with harder dried wood. I'll use gouge chisels at home where I can clamp the spoon down and work a harder dried wood quickly. Knives become useless with harder dried wood. They just struggle to cut the tough wood and fatigue sets in quickly.


*Shinto Saw Rasp.*

Shinto Saw Rasps are the chainsaw of the hand tools world. They are basically hacksaw blades fused into a lattice. I haven't found any other tool that can reduce wood so quickly and efficiently. Brilliant for hardwoods. You can cut the spoon blank out and shape the spoon with the Shinto. They really are a marvel to use. Much better than regular files and rasps. However, they will not leave a good finish on the wood so the spoon either has to be completed with a knife or sanded down.



*Files and rasps.*

Files and rasps save a lot of expense on course grit sandpaper, leaving a finish on wood similar to 60 grit sandpaper. They are also really good for shaping curves and corners but will not

give a good finish to the wood. I use them for dry woods and hard woods. If I need to shape something and I can't get at it with a knife or I want to thin it down before finishing.

The knives gouges and files mentioned above have their merits and disadvantages. You are likely to lean towards some of them more than others in making a choice. Tool making is massive subject in itself and well worth learning about, if not just because it makes you better understand the functioning of your own tools.

# Safety

All of the tools mentioned have very specific ways of using them safely. To cover safe use for all of them is beyond the scope of this book. Read up on their safe use individually. I have covered basic knife techniques later in the book and there are also lots of good videos online of safe knife and axe use and various cutting techniques.

## Don’t work tired!

All the injuries I’ve had with tools has been because I was worn out. Either through my enthusiasm lasting longer than my energy or feeling the need to work longer to get a project finished. Your mind and body will give you early warning signs. Losing hand-eye coordination and starting to do bad cuts will show you it is time to stop. Near misses with the knife, almost getting cut is another warning sign. Stop immediately even if your brain is telling you 10 more minutes. Put your tools down. Go get something to eat and drink. Then decide if you’re done for the day.

Always have a first aid kit out nearby. It can be a challenge to go fetch the first aid kit, get it open and sort a plaster out whilst bleeding! If you have it out nearby, that makes life a lot easier. First aid courses are worth their weight in gold. They’ll give you an insight into how a serious injury can occur and how to administer the correct treatment. Everyone gets cut at some point, but with enough carving practice, you can reduce the odds by always using correct techniques and stopping when tired.

# Making a Spoon

Enjoy the process, take your time, stop, rest, leave it a few days, have a think about how it is going. Consider the shape, any problems e.g. knots, holes, splits. Look at the spoon from all angles and different light so you can fully visualise it. Always carve in natural daylight. Artificial light hides all the subtleties of shape and form. Natural light reveals all of the fine detail. Come back to spoon carving when you're ready. This creates a much better end result than rushing through and trying to finish the project quickly. Your mind will try to force a shape on the wood whereas the wood will tell you what it wants to be. It takes time to listen and understand what the wood is trying to tell you.

# Wood selection

The following is a list of wood types and their properties for carving. The list isn't exhaustive, it's is there to get you thinking about the properties of wood and its finish.

| | |
|---|---|
| **Alder** | A cream coloured wood with orange lines running through. It's very soft so doesn't allow for detailed carving but that softness makes for easy carving. |
| **Apple** | A very easy to carve and can have interesting tones between the dark heartwood and lighter sapwood. |
| **Ash** | Very tough and doesn't damage easily. It is really tough to work with and even harder when dry. It can split out when you're working it too. |
| **Beech** | Another tough wood used for kitchen utensils. |
| **Birch** | The choice for Scandinavian wood carvers. Easily obtainable and carves well. |
| **Blackthorn** | Many similar characteristics of other fruit woods. The dense character allows for detailed carving. |
| **Cherry** | Easily worked when green and has a light orange colour when dry. |
| **Cottonwood** | Easy to work but isn't very durable. |
| **Field Maple** | A good carving wood. |
| **Hawthorn** | It has twisted branches and stems making it interesting to carve with. |
| **Hazel** | An easy wood to carve. I find it somewhat plain in colour and grain. |
| **Holly** | Dense grained and hard wearing. |
| **Lime** | Has a very even texture great for carving. Quite soft for a spoon. |
| | |

| | |
|---|---|
| **Maple** | Hard and dense, great for detailing. |
| **Oak** | Tough dense wood suitable for gouges and chisels. But is strong and very durable. |
| **Plum** | Similar qualities to apple wood but is a darker, mahogany in colour which can be sanded to a high sheen. |
| **Sycamore** | The choice of Welsh love-spoon carvers. It carves easily when green and spalts easily. |

The decision points are really whether you want to work with a green wood or dried. Then how soft or hard is the wood going to be. This will determine the tools needed. I would recommend getting the cheapest and easiest available wood you can to start with. This way if your early attempts fail, you won't have wasted good wood. For my local area hazel would probably be the best as it coppices or pollards meaning that you can cut it and it will regrow quickly. Whereas oak and hawthorn for example are much slower growing and wouldn't regenerate like hazel. This is something to consider, how much environmental damage will you make if you cut something down for spoon carving? One of the best resources of green wood are tree surgeons who can supply you with a lifetime of green wood for carving.

There are also other properties of wood that are available to you. Wood burls for example, are the wort like features that you see on some trunks of trees.

*Burl on a sessile oak.* (4)

Burls produce beautifully patterned wood grain caused from erratic growth. This makes them a challenge to carve with knives and they are mainly worked with chisels and files.

*Field maple burl with stunning grain pattern.*

Suitable burls are a challenge to acquire. Modern forestry doesn't generally harvest them. And the people who do sell them, tend to cut them up into much smaller pieces for knife

scales. If you do find a piece, there is a good chance that it has many splits and pits. The erratic grain causes uneven drying which results in severe splitting and cracking. That is why many burls intended for knife scales have been stabilised with resin hardeners. You might be able to find a small piece that will be suitable for making the smaller spoons.

If you want an easier wood to carve but also have some interesting features, spalted wood is really beautiful. The wood has coloured lines and patterns within the wood grain. Spalting is any form of wood colouration caused by fungi. The wood is generally dry and going through a process of decay.

*Spalted birch log.*

If you acquire some spalted wood, look out for soft decayed spots that are to be avoided. Common spalted woods include maple, birch and beech. It is easy to buy spalted wood. Simply look online for spalted wood turning blanks. Birch goes quickly from spalted to rotten so there may be patches of rot within your carving piece. There are ways to stabilise this rot. If it is a small amount, you can glue it with cyanoacrylate glue. This acts as a hard and clear resin that strengthens any soft spots and fills any holes. In terms of potential toxicity when

using the glue, it has been used for a long time in in medicine for such things as sealing wounds. The biggest risk being the application of the glue and the fumes irritating the respiratory tract. If you choose to use cyanoacrylate glue or something else to stabilise the wood, or repair a crack or split, read up about the glue first and decide if you still want to use it.

As mentioned earlier, spalting is from fungal decay. That means your spoon will be impregnated with fungi. Because the spalting is so attractive, it has been used in cookware for a long time. I do not think you need concern yourself with the possibility of becoming ill from the fungi within the wood but this must be your choice.

# Wood preparation

Whether you are working with green wood or dried, you will need good flat surfaces to draw your template on and begin working with. If you buy a wood turning blank, the surfaces are pretty good to use straight away. If you are using a fresh green log you will need to prepare the surfaces.

*Birch tree trunk just large enough for spoons.*

If harvesting fresh from a tree, look for a section of trunk that is knot free and is large enough for the size of spoon you intend to make. Bear in mind that you will split the trunk and only work with one half. Allow extra length in your measurements for ease of working. Saw off a length of the log. The log I am using is from a birch tree felled a couple of years ago as part of clearance on private land. I intended to use it for a tipi pole but never got around to making the tipi.

Birch rots quickly and much of it has already rotted away but some of the wood is still good to use and has a beautiful spalting pattern. I really want to use it before the rest of the log

rots out. I am taking a risk using spalted wood as I might end up with soft spots that I only discover whilst carving. But the spalting should be worth the work and produce a beautiful spoon.

*The log has to be wide enough and deep enough for your spoon.*

*Log spit down the centre creating two billets.*

Split the log through the centre of the pith. Pith is typically the dark central ring of the log which we remove for carving. By not using the pith you are reducing the chances of splits and warping. There is a lot of tension within the inner growth rings and as they dry, it can split the wood apart. Now you have two billets for spoons.

*Twisted grain running through the log.*

Now you have split the log, take a look at both billets and decide which one will be best to use. In this instance splitting the log has revealed a twist in the grain structure. This means that the tree twisted during growing. Perhaps due to stress factors. We can still use it for spoon making. If I was intending to make an archery bow, twisted wood is unusable as when you draw the bow back, the bow wants to twist, and the growth rings split out. You won't be putting any physical stresses on a spoon e.g. trying to bend it so twisted grain is acceptable to use.

Also look out for any irregularities or knots. Now that you have opened the wood, you can see inside and have a better understanding of how the wood has grown. In this instance, I am looking to see if there are soft spots where the spalting has

rotted out. I am also looking at a knot that runs through the billet and deciding whether I can work around it. Birch can have lots of small branch growth producing knots.

*Shaping the billet.*

With your axe and knife, create a flat surface on both top and bottom of the billet. Remove any remaining bark. You will now have created a wood blank that is ready for the spoon template to be drawn on.

# Drawing the spoon

We are going to make a typical camp eating spoon or better known as tablespoon. Most of us see tablespoons every day. We can shut our eyes and picture one pretty easily. Surprisingly, if you try to carve one from memory, you will make an ugly mess. Typically, the bowls end up like a trough shape and are as deep as a bucket, with the handle being matchstick thin. Everyone will congratulate you on making a spoon, but it will look terrible and feel horrible in the hand and mouth. It is really difficult trying to carve a specific shape from memory onto wood for the first time. Edges quickly no longer square up and lengths become out of proportion. The best way to resolve this is by drawing your shape onto the blank first and following it religiously. Again, you can do this freehand for a rough shape, but it is better to be more precise by using a template. It is a joy to watch professional spoon carvers not needing to draw anything. Just using the axe and knife. They have caved the same styles of spoons so many times that it becomes instinct. After many, many spoons our skills can hopefully develop too.

Tablespoons have a pretty complex geometry that we take for granted. It’s so well shaped, we pay little attention to it as an object, but we need to understand the geometry to make a good spoon.

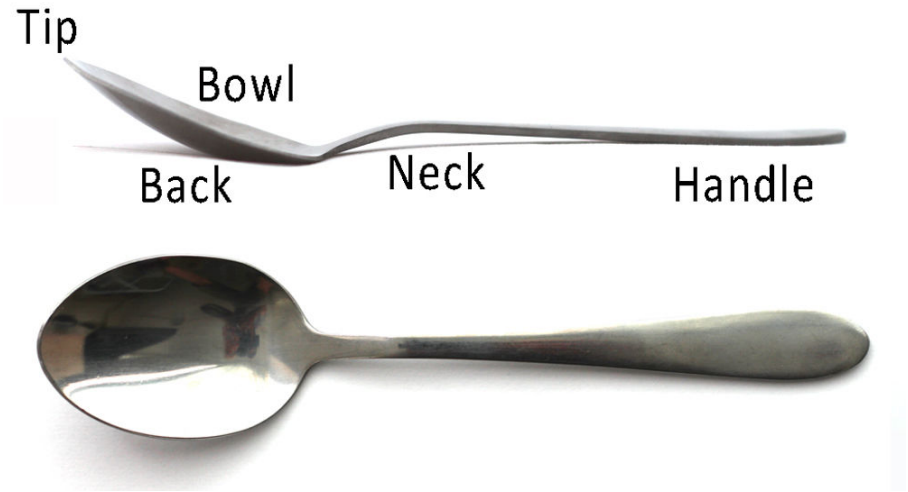



*Table spoon geometry.*

Notice how the bowl is tilted at 30°. This is so the bowl will sit level when held. The neck is curved or ‘cranked’ so it sits comfortably on the middle finger. And the handle is tapered to fit perfectly between the thumb and index finger.

*Perfect geometry comes from using objects every day.*

The bowl is perfectly shaped. Pointed to get into the corners of bowls and scoop anything up. 60mm long by 42mm wide and is the ideal size to fit an adult mouth. Total length is 1/3$^{rd}$ bowl,

2/3rd handle. As long as we do not stray too far from this shape, we will make a very good spoon that will be familiar to the user.

The most basic tablespoon template will be any spoon you may have that can be drawn around and used to get a perfect shape and size. It seems bizarre to bring a perfectly good tablespoon with you to camp and then spend hours making one. The truth is, until you have made a few, the shape and size won't come naturally to you. Think of it as using training wheels.

*Tablespoon used as a template.*

Draw around the shape of an upturned spoon with a pencil. Make sure you get thick, defined lines that are easy to see. Your pencil must stay vertical at all times. If you tilt it forward, backwards or sideways, this will make the shape bigger or smaller and uneven.

*Table spoon shape drawn out.*

Take the spoon off the wood and examine the shape. It may need drawing over a bit to thicken the lines or cover missed spots. I also like to draw a line down the centre the full length of the spoon. From the tip of the spoon to the end of the handle. This will instantly show me if I have drawn an asymmetrical spoon.

# Start the bowl

*Bowl wood removal.*

Now everything is drawn out onto the wood blank, remove most of the wood from the bowl. It's much easier to do this now when the spoon is in the blank. You can hold the large billet and steady it easier than a thin spoon. It also reduces the chances of breakage through stressing the wood. If using gouges, spoon knives or crooked knives, start across the grain so that the grain doesn't run and split past the template lines.

I find it hard to judge how well the bowl has been carved out and if it remains true to the template. By removing only 90% of the bowl, I know I will still be well within the template and can tidy it with finishing cuts. This tablespoon has a 30° bowl so quite a lot of wood needs removing to get the depth and correct shape.

*The ruler represents the top of the blank and the depth needed to carve out the bowl of the spoon.*

Whilst removing the bowl wood I have uncovered a hidden knot within the wood. They can be a real issue when the wood is drying as they will dry at a different rate than the normal grain and there can be a lot of tension in them. They can split really badly. Having said that, I've got other spoons where the knot has behaved and there hasn't been an issue. At this point I need to decide whether to carry on and hope for the best or discard this blank. It's spalted birch which will leave a beautiful finish and the knot may look good too. If there is an issue, unless it is fatal, I may be able to glue or patch it up. Professional spoon carvers have less of a luxury of choice. They don't want to have a spoon split for a customer, and they don't want to be adding glue. I suspect they would probably reject this blank and start again.

I always think of spoons as organic items that are not meant to last forever. We do the best we can to maintain and look after them. But they don't have to be perfect or indestructible.

Now that the shape is drawn and the bowl has had some work, it's time to axe the blank out. Some people saw horizontal lines at the neck of the spoon. These are stop cuts. They will be where the bowl meets the handle. When using an axe, this will prevent the splitting wood running into the bowl. I've had to glue spoon bowls where I have used the axe to remove wood from the spoon handle and the split has run right into the bowl. I find cherry wood is susceptible to this when

green. Birch is also a good wood when green but will run a split when dried.

# Axe the roughout

We only axe out one profile at a time. Start with the vertical profile. This will cut out the width of the spoon and create a shape. Once the vertical profile is axed out, tidy it up with a knife. It's important that the shape cleanly cut as you will use it for creating a template on the horizontal profile.

*Axe out the template from the wood. Vertical profile being removed.*

Use the axe to get off as much wood as possible before switching over to your knife. The axe is the quickest and most efficient way of removing large amounts of wood. When you can't axe anymore off or you're getting nervous about how close you are to your template lines, switch to your knife.

If you are working with a tough or dried wood, or perhaps hitting knots in the blank, your axe will quickly become dull. This will start producing rough, hacked away cuts that will be time consumer to repair with a knife. Don't be afraid to sharpen your axe, perhaps several times, during the axe work to keep it razor sharp and cutting cleanly.

*Kestrel C type crooked knife.*

The Kestrel C type crooked knife is ideal for tidying up spoon blanks. You can push cut and pull cut without having change grip. I find it much quicker than a mora 106 for this job. The mora 106 will do the job, just a little slower.

It's really, really important to tidy up the spoon blank before working the other profile. Cut right up to the template line. It's natural to work to the template line at the top but be accidentally wider at the bottom of the blank. The profile has to be the same width from the top of the template to the bottom. And the walls of the template need to be smooth. Hold the spoon blank up to the light, move it around, feel it to get an idea of where any more work needs doing.

The issue is that once you start working the horizontal profile your line drawing for the template is going to get cut out. Any bad profiles are going to be harder to see. You end up spending the bulk of your time trying to square up the spoon and regain the symmetry. Any asymmetry in the spoon will be really obvious to the eye. When you hand the spoon to someone for the first time, you will notice them spot the asymmetry even if they say nothing. It's a bit crushing to

know that someone has found your mistakes in the spoon. Our aim is to make our mistakes so small, that only we notice them. There will always be minor imperfections in a hand carved spoon. We just make as few and as small as possible.


*Vertical profile removed.*

Now the horizontal profile is exposed, mark it up using the spoon again. Now is a good time to look for any knots, rot or anything that may cause problems.

*Horizontal profile drawn out.*

Looking at the horizontal profile. Ideally it would've been better drawing the spoon upside down and following the grain of the wood. The grain would've curved perfectly with the shape of the bowl and made it really strong. Instead, the bowl cuts across the grain creating weakness in the bowl that can lead to breakage. I had to draw it this way to reduce the impact of the knot I exposed in the bowl.

If I had drawn the horizontal profile upside down to follow the grain, it would've gone through the thickest part of the knot and created a potentially worse problem for me.

*Knot of doom!*

The knot will either split and crack or hold. It's early spring and about 13c temperature. Still mild and very humid so drying will be quite slow and even throughout the spoon. If this was summer and +30c, it would dry very fast and unevenly. This would put stresses throughout the wood, and I would soon see splits and cracks appear.

If the knot had gone through the full width of the spoon and to the edges, I am pretty certain that it would eventually split out. The different speed of drying between the knot and regular grained wood means that they shrink through moisture loss at different rates. This is how they separate and split.

Because there is quite a large amount of regular grained wood surrounding the knot, it stands a good chance of being held in place. If that area can be thinned out quickly, the stresses will be reduced.

*Spoon fully axed out and ready for knife work.*

Once both profiles are axed out and tidied with a knife, the main knife work can begin. This is the ideal time to take a break; simply bag up the knife with some woodchips and shavings. As long as the bag is air tight, the moisture will remain in the greenwood spoon, making it easier to carve when you come back to it. It can be left for quite a while like this, although if you are thinking of several days, it is worth checking on it each day to ensure no mould or rot is beginning to appear.

I will sometimes wet the spoon with water to help keep the moisture in before placing it in the bag. When a spoon dries slowly the moisture is released more evenly. This reduces the chances of splits and warping of the shape.

# Knife work

Spoons are a great way to learn about wood grain and using multiple knife techniques. Their complex shapes ensure you meet grain from all directions and angles. You'll find that one direction of cutting will be easy, and another direction will dig or get stuck into the wood. When you're cutting against the grain of the wood, you will dig into the growth rings of the tree and get stuck. This also happens when trying to cut up a curved shape.

If you carve with the grain of the wood, it will shave the wood off cleanly. This also applies when carving down a curve. Cutting across the grain works well and can be a very quick way to remove wood.

I will now cover some basic knife techniques for carving. There are some more techniques, but these are the foundations for carving. Images can't show the full detail of what is happening so I would recommend going online and seeking out knife carving technique videos. Take some time to watch several people doing similar techniques and you'll get an idea of what good carving looks like.

Firstly, we need to be respectful of the knife, a good carving knife is razor sharp and will cut you with only the smallest of glances. When carving have a first aid kit nearby that is opened and ready to use. Small cuts can be easily treated with plasters.

*Forehand grip.*

The forehand grip is the most obvious knife technique for carving. It's straightforward holding the knife and pushing away from the body. What people get wrong is they use the forehand grip but are doing the cutting with the spoon and knife held out in front of them between their thighs. If the knife slips, it could go into their femoral artery and the loss of blood will be life threatening. We use a safe forehand grip by holding the knife and spoon to our side. That way, if the knife slips, it won't go into your body.

The forehand grip is a strong and powerful cutting technique that can remove a lot of wood quickly but isn't good for finer, more controlled work.

*Chest lever.*

The chest lever cut is made by turning the knife around in your hand, so it is facing the opposite direction. Tuck your elbows in and push your chest out with the cut. It’s a really powerful and controlled cut. It can remove a good depth of wood but not length. More controlled than a forehand grip but is slower.

*Thumb push.*

The thumb push cut is made by placing your thumb on the spine of the knife. The other hand just supports the knife whilst the thumb pushes through the cut. It's a really controlled way of cutting. The blade is never going to run through the wood accidentally or slip off. It can only remove small amounts of wood at a time. This is used for a large amount of the fine, finishing cuts.

*Pull Stroke.*

The pull stroke is done by reversing the knife and the and cutting towards you. With the blade vertical doing controlled cuts, it is a safe way of cutting towards the body. This technique is useful for working grain directions that are hard to get with other cutting techniques. This isn't a fast, quick removal method, more a controlled steady technique. Tuck your elbows in tight to your chest to gain more control. You can also support and guide the cut by pressing on the spine of the knife with the fingers of your other hand.

*Push cut.*

The push cut is what I mentioned the Kestrel type C crooked knife offers. This is a very fast way of removing wood quickly and safely. Your body is always placed behind the cuts so if the knife slips off, it's not going anywhere. The cutting can be difficult to control as it wants to run the full length of the wood. It also feels weird to hold a knife and cut this way, especially with a conventional knife. With crooked knives you quickly become used to the feeling.

This is only a brief introduction to knife techniques. They really need to be seen to be understood. Either go online and watch some videos or get yourself in front of a competent wood carver.

The axe work shaped out the spoon blank and the knife work tidied up the two profiles. You now need to turn the spoon blank into a spoon. A lot of the work will involve thinning the bowl from above with a spoon knife and below shaping the bowl with your mora 106 or equivalent. This really does take a little patience as you want it to be as thick as possible to be strong, but also as thin as possible so that it doesn't feel weird in the mouth. Work on the bowl then look at it and feel it in your hands. Check for any lumps/bumps of

unevenness in the bowl that are noticeable? Then place it in your mouth. Does it feel like a spoon yet?

The neck also needs careful work. It has to be strong to reduce the chance of the spoon snapping but also thin enough so that the spoon doesn't look crudely made. Steel spoons do not have this issue so can be very thin necked. We either need a wider neck or one with more depth to ensure strength. Don't carve the neck too thin as you can't uncarve wood!

The handle needs to feel nice in the hand. If you leave the rough edges of the spoon blank on, it will feel terrible to hold. There shouldn't be any hard angles or sharp edges. Cut slowly, diligently and constantly check your work visually and feel it with your hands and the bowl with your mouth. Look to maintain the symmetry and develop the beauty of the spoon. Knife work really needs to be done only in daylight for you to be able to see everything clearly and correctly.

All of the green wood working is complete. I've thinned out and shaped as much as I can. Because it is green (wet), the wood is soft. I cannot do finer knife work. Dried wood cuts much finer and you can get more detail. I let it dry out slowly over the next couple of weeks by keeping it in the shade in a cool environment. People will often ask what the best way is to dry a spoon safely. They do not want to dry it too quick, so it splits. And do not want to dry it too slow so that it goes mouldy.

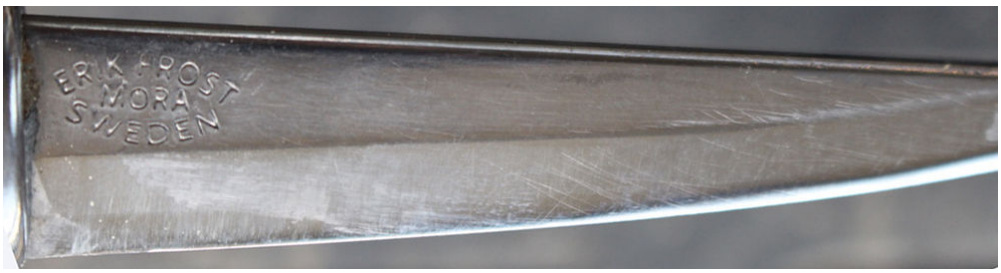
Answers vary and can be almost ritualistic. For example, three days in a paper bag with shavings of the spoon. Then leave the bag open a bit for a week. Then in a cool room for weeks. Everyone has their own different opinions on the best way to dry wood and prevent splits and cracking.

Try to dry your spoons slowly, but don't get too hung up about it. Of course, if you've bought a wood turning blank, it should be well seasoned and hopefully give less problems.

If you are making a spoon in camp to be used straight away, do as much knife work as you can and then use it. The spoon will dry over time and you can finish it later if desired.

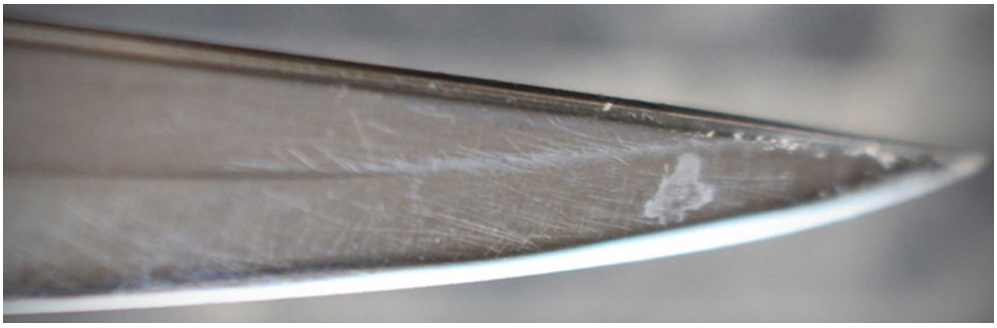
# Knife sharpening

Eventually your knives are going to take a battering and will no longer be as sharp as they once were. You will notice that you produce chips more than shavings and sometimes the wood will split. If you take a look at the blade edge you will see that a lot of rough scratches have built up.




*Scratches along the knife built up from use.*

The Mora 106 has a Scandinavian flat bevel grind so the wear can be easily seen. The tip of the knife often gets the most damage.



*Significant scratching along the tip dulls the blade.*

Stopping short of buying a new knife every time the cutting-edge wears down, you are eventually going to have to sharpen the blade or get someone to do it for you. This sounds straight forward but actually a lot of people really struggle with sharpening their tools. They either avoid it by selling their

used tools and buying new ones or they have a go at sharpening and make a really big mess of it. This is particularly tragic if done on expensive or collectable tools. I've seen many used sales adverts online where the sheath is left on the knife and there are no images of the cutting edge or the edge can't be seen clearly. This rings alarms bells to me and suggests they've abused the tool and been unable to sharpen it properly.

For me, being able to sharpen your tools is a right of passage. It is something that must be learned if you are going to be using them. Most jigs or sharpening systems designed to make the task easier tend to put a different profile on the edge. For example, a Scandinavian grind may end up with a secondary bevel if sharpened with one of these jigs. The task should be done by hand, learned patiently and diligently.

One of the first hurdles to overcome is the term 'sharpening' this creates an image in the mind of someone grinding away the edges of a knife using a whetstone. Television doesn't help with this as whenever they want to depict blade sharpening, it nearly always includes a large stone and grinding noises. People quickly fall into this trap when learning to sharpen. They spend a large amount of time with a course grit stone frantically working away for hours to only produce a dull edged knife. I was certainly guilty of this when I started. In order to understand the process better we can look at it in a different way.

It's your birthday, congratulations! You've even got a sponge cake with icing and are tasked with cutting it. There is a choice of bread knife or kitchen knife. If you use the bread knife, as you start to cut into the cake it will shred out the icing and break it into small bits. As you continue cutting through the cake, the sponge inside will be dragged out like wood chips coming off a chainsaw. Bread knives make a real mess of cakes. I've done it and had regrets!

If you use the kitchen knife, it will just compress the cake down until it guillotines through the cake rather than slicing it. This is because many households never sharpen their knives!

Or even worse, choose not to sharpen a knife because it makes them ‘dangerous’!

If you use a sharp knife, you’ll cut the cake no problem and there won’t be a mess of crumbs all over the floor. The edge of a dull knife looks like the serrated edge of a bread knife. It’s no longer smooth, but instead is covered in scratches. It will still cut but will be more like a bread knife and tear away at the wood leaving rough cuts. We need to return the edge to a smooth condition. This is done by creating a highly polished surface on the cutting edge. The less scratches we have, and the smaller they are, then the sharper the blade will be.

The sharpest tools I have ever owned all have one thing in common. The cutting edge is a mirror polish and no scratches can be seen. If we used the term ‘polishing’ instead of sharpening I think people would understand the process better.

When I am in the woods, I will use a DC4 whetstone. The gold coloured side is a fine diamond stone (25 micron) and the other side is a ceramic stone made of synthetic sapphires.

*DC4 Whetstone.*

It’s straightforward to sharpen a Scandinavian grind. Simply lay the bevel flat against the stone and move it up and down the length of the whetstone, using both hands to push and pull. Be careful not to over-tilt the bevel as you will get a secondary bevel. If you under-tilt it, the stone will not be sharpening the cutting edge. You need to feel like you are trying to take a fine slice off the whetstone with each pass.

*Sharpening ½ way along the length of the blade.*

With this process you are removing all the different sized scratches and making uniform scratching along the length of the blade. These new scratches create an even and regular surface for you to work down to the finer grits.

*Whole length of the blade is evenly worked.*

One way of telling if you are working the whole blade is to put black pen marker along the cutting edge and then work it with the whetstone. It will show you what has been removed and what is left. You must get an even surface along the length of the blade before moving on because the refining stages cannot remove big scratches.

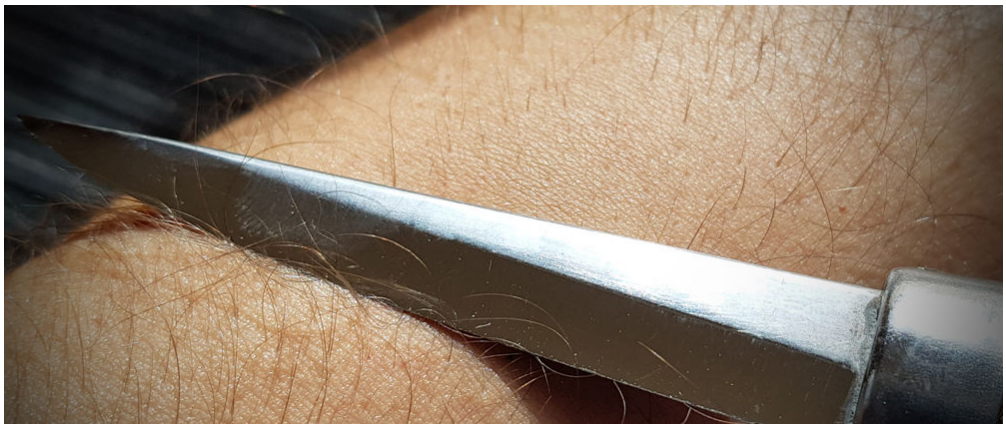
*Ceramic side of the DC4 whetstone.*

Once you have both sides of the blade worked on the coarse side, switch over to the ceramic side of the whetstone and work the blade. This only needs a little work as it is designed to remove the burr from the cutting edge. This burr is steel that is removed from the blade but stuck to the edge.

*Leather strop and autosol compound.*

To complete the sharpening process, I use a leather strop and autosol metal polishing compound. Leather strops are excellent as they polish the finest of scratches out leaving a mirror like finish to the blade. Autosol also leaves a wax coating on the blade, prolonging its life. The compound is an ultrafine grit that works with the leather to produce a really nice finish to the blade.

The knife has to be pulled backwards across the leather strop. You cannot push it forward as it will cut into the leather. Again, a marker pen will tell you if you are doing the stropping correctly. Count a number of strops on one side of the blade and repeat that number on the other side. This ensures an even amount of work on both sides of the blade.



*Shaving sharp.*

You will be able to tell if you have made the blade sharp by either scraping it across a finger nail and see if it scrapes up nail or by shaving some arm hair. If a knife can shave arm hair, then it's razor sharp and you have done the job right.

A lot of people will be disappointed at this test because they have spent a lot of time sharpening the knife and it is still blunt. This is really common and that is why a lot of people give up learning to sharpen. If it is still blunt, somewhere along the process you haven't got it quite right. This is probably in maintaining the bevel angle throughout the sharpening.

It takes time to learn how to sharpen and learning from the feedback of what the knife is telling you as it passes over the stone. The vibration and sounds all have meaning linked to the angle of the bevel, how fast you are working and pressing down. Whilst you are learning to get it right, you can cheat a little if you're struggling. Whilst stropping, simply lift the bevel of the knife a little higher and this ensures contact with the strop. It will reach the cutting edge and make it sharp. You have basically made a secondary bevel and the cutting edge will be a bit more like a convex bevel than a Scandinavian one.

# Templates

We used a table spoon in the first example of a template and simply drew around it. This limits you to what you have in your kitchen drawer for shapes. It doesn't push your skills further and doesn't free you to create your own designs and inspirations. The following pages provide several templates for spoons and detailed information on how to carve them. Once you get familiar with drawing templates and their geometry you will then be able to create any design that you wish.

You will need a pencil and a ruler to draw out the templates. You can also use a permanent marker to make sure the pencil lines aren't accidentally rubbed out and a compass ruler can be used to create circles and draw the bowl shapes. I recommend practicing drawing the templates a few times on paper first before drawing them onto wood. This way you will be confident in the design and unlikely to make mistakes.

Drawing a template may sound complicated but once you have drawn one or two, they make sense and it's easy to get creative with designs. Please note that although exact measurements have been given, you're not expected to work to them perfectly. A few millimetres difference is perfectly acceptable and is expected. You are not looking to make perfect replicas, but you do want to make a good spoon. You will notice a few mm difference in width of the spoon but not necessarily depth. If your measurements go a little astray, shape the rest of the spoon to bring back the right proportions. Sometimes that means making it a little thinner or shorter than you had hoped.

Most of all have fun and enjoy your carving! As long as you are enjoying the carving and progressing the skills, you will quickly become a very competent spoon carver.

*Eating Spoon. Spalted Birch. Sanded finish with Tung oil.*

# Eating Spoon

Wood: Spalted Birch.

Total length: 18.5cm

Bowl length: 6.5cm

Bowl width: 4.2cm

Bowl depth: 12mm

Bowl angle: 30°

Handle width: 10mm at neck tapering to 17mm.

Handle depth: 12mm at neck tapering to 8mm.

This is modern table spoon geometry applied to wood. The bowl is angled and there is a crank in the handle which results in a challenging shape to carve. This produces an extremely eye-catching spoon that is perfection to hold.

Slight modification of geometry has been included to place strength in the spoon. The bowl is thicker than that of steel at around 3mm. Always carve the bowl as thin as you comfortably can. I like to put the spoon in my mouth as if I were eating to see if the bowl feels thin enough. Your mouth is very sensitive and knows what a good spoon bowl should feel like. Sometimes they look thin but feel very thick when you put them in your mouth.

The neck is also 12mm thick tapering to 8mm. Much thicker than any steel tablespoon. It also extends into the bowl adding additional strength. These few modifications ensure a strong spoon with no loss of function or beauty.

This spoon will take quite some time to carve. The complex shape has to be brought out of the wood and the bowl has to be carefully brought to oval symmetry. The beauty and familiarity of the design makes this a great spoon to give as a gift.

Prepare your spoon blank as described previously. Last time we used a spoon to draw around and use as a template. This time you will be drawing the template directly onto the spoon blank. I would recommend practicing drawing spoon templates at home so you can get comfortable with the process before you attempt to make a spoon using it. The same method of template drawing applies to all spoons.

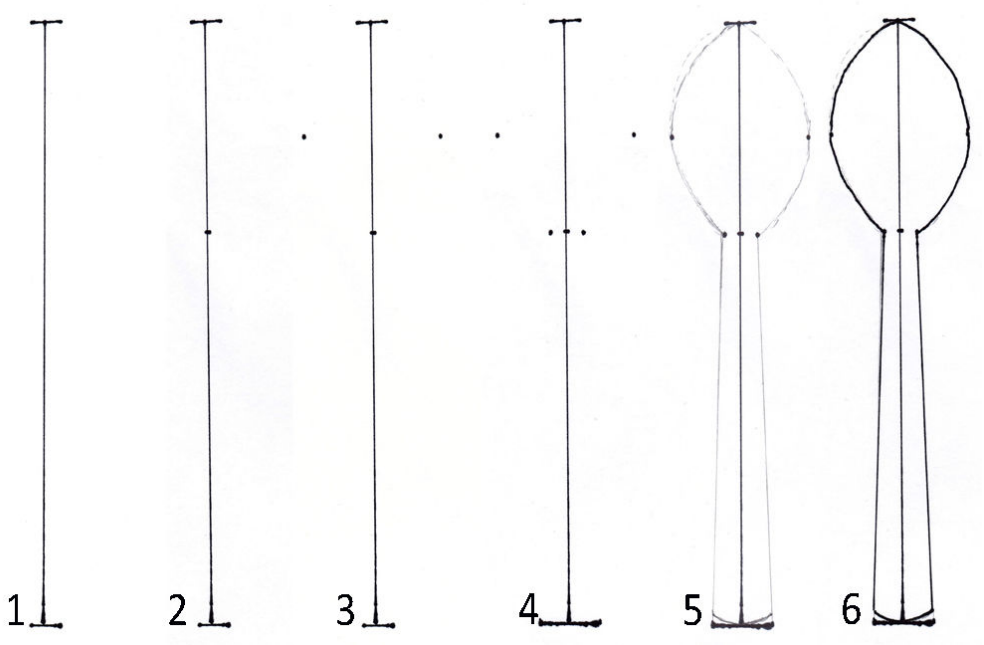
First draw the total length 18.5cm and mark off the ends. This is the basis for all other measurements and it's your central line used for creating symmetry. Next mark off your total bowl length of 6.5cm. This will be a marker for where the bowl ends and the neck will start. You now need to mark the bowl width. This is the maximum width of the bowl. For the shape of this spoon, the maximum width is over half way down the bowl 3.5cm. Mark this from the tip of the spoon. From there mark out your maximum width of 4.2cm. We do

this by dividing 4.2 in half and getting 2.1cm. This is where you place the ruler on the central line. Marking off 0cm for the left of the bowl, 2.1cm is the central line and marking off 4.2cm for the right of the bowl.

The neck width is marked out the same, taking 10mm dividing it by 2 to get 5mm. Mark 0mm on the left of the central line, 5mm is the central line, mark 10mm on the right of the central line. At the end of the handle do the same but use 18mm (17mm doesn't divide into 2) as the maximum width and 9mm is the centre line.

Now pencil line the curve of the bowl. We use pencil first as it can be a challenge to get the right curves and shapes drawing freehand. If you wanted a more technical spoon or a different shape, you can add more measuring markers or change the dimensions. As long as you are working off the central line and dividing total width measurements by 2, you will always get a symmetrical spoon. When you have drawn the bowl, draw the lines which connect the neck to the end of the handle.

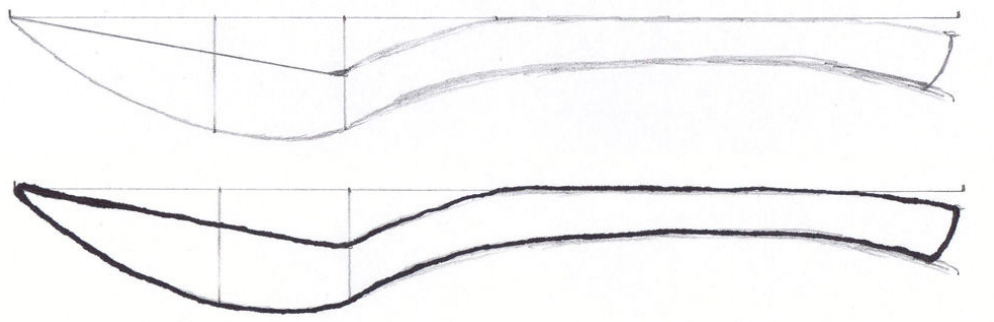
Once you are happy with the pencil drawing, I like to go over it in permanent marker, so it doesn't get rubbed off whilst I am carving. You can also add a bit more styling at this point.



*Template drawing process.*

The side profile is more challenging to draw. We start by drawing the total length line again 18.5cm. Then mark off the total bowl length 6.5cm. We draw a line down from that at 22mm. Also marking off 10mm. This gives us the 12mm neck depth. At the end of the spoon draw a line down and mark off at 11mm and 3mm. This gives us the 8mm end depth.

Mark 4cm from the tip of the spoon and draw down to 22mm. This will give the curvature of the bowl. Now pencil in the shape. Draw from the top of the neck a straight line to the tip of the spoon. Then draw the curvature of the bowl. Finish by drawing the curvature of the handle. Making sure to keep the thickness even. Freehand drawing the curve of the handle can be a challenge. The pencil allows you to correct mistakes. When you are happy with the shape, go over it with a permanent marker.



*Side profile measured and drawn.*

Some people also use paper templates. It's a very quick way to produce a symmetrical template. Simply fold over a piece of paper and draw the spoon against the edge of the paper. Then cut out the shape and unfold the paper.

*Quick eating spoon. Cherry wood. knife finish with Tung oiled.*

# Quick eating spoon

Wood: Cherry.

Total length: 19.3cm

Bowl length: 6.3cm

Bowl width: 4.4cm

Bowl depth: 14mm

Bowl angle: 0°

Handle width: 11mm at neck tapering to 15mm.

Handle depth: 10mm at neck tapering to 10mm.

A practical and realistic spoon for the camp. I have worked on the design and making process to be as easy, quick and efficient as possible. This is the sort of spoon you can make on wilderness trips. For those sorts of trips, I will always carry carving tools. If some of my equipment breaks, gets lost or I have forgotten it, then I can carve a replacement. This rarely happens and in reality, I just love sitting by the camp fire whittling away with some wood. It's incredibly relaxing and I get to take a memento home to remind me of the trip.

This spoon has no crank and has simple geometry. It's a good spoon to learn carving with. Although I've called it a quick spoon, I'm reluctant to tell you how long it takes to make. Everyone should carve to their own abilities and skills. If you are rushing, trying to get it done in time, then it's unlikely you'll produce a good spoon. But practice will make this a quicker and quicker process.

This spoon was made with cherry wood which offers beautiful rich colours of oranges and reds. Cherry wood also has really distinct growth rings so the grain pattern will really stand out when it is finished.

*Secondary split maker.*

As there will be no crank on this spoon you will not need to carve deep into the wood. You will only need approximately 18mm thickness of wood. The quickest way to get an 18mm blank is to split the log again. Take some consideration with the materials you have got. Here I have a small log that presents a few problems. If I use the outer 18mm It is really close to the borders of the measurements. There is a good chance I will corner myself into a position where I end up making the spoon smaller to fit the size wood I am using.

If I take the first 18mm thickness it is in the pith and heartwood section. With small tight rings that can potentially split and warp when drying. But the first 18mm also offers more wood and the deep red of the heartwood contrasting with the orange of the sapwood. Plus, the tight rings will give a great grain pattern. The pith isn't really obvious nor in any condition for cause of concern. I can't see any rot in it. Most of that will be carved away with the spoon bowl so will be cleared out.

*Spoon blank ready for work.*

Baton the log with your knife by placing it along a line drawn along the wood. Tap the back of your knife slowly and carefully to split the log. If the wood has lots of twist or knots in it, this can go wrong quickly.

*Spoon template drawn out.*

I've drawn the template on the spoon blank and carefully aligned it with the heartwood to get the best pattern. I've also avoided a knot on the other side. I've started cutting out the bowl using a twca cam. When the blank is this big it's easy to get a large spoon knife on it and quickly remove wood from the bowl. The grain in the bowl is looking amazing already.

*Thin blanks have to be worked carefully.*

As I remove the bowl wood, I am constantly checking the thickness of the wood by placing my thumb and forefinger in the bowl in a pinching motion. Between my fingers I can roughly tell how thin it is getting. I also stop and look at the bowl from many angles. It's not just about removing wood from the bowl; you have to do it evenly right across the bowl so there are no high points that you will notice with your mouth. You also want to make the bottom of the bowl where it meets the neck deeper than the tip of the bowl. This will give the right shape people are used to using.

*Stop cuts sawn in at the neck.*

As mentioned earlier, stop cuts can be sawn near the neck to prevent splitting running into the bowl. They can also be used for quickly splitting out large sections of wood.

*Sections split by batoning with a knife.*

You need to be really careful with wood grain when batoning. In the image, notice how the splits are not perfectly straight lines? That is because they have followed the wood grain. You need to see where the wood grain runs before batoning. If the grain runs into your spoon, use a growth ring farther back that doesn't run into your spoon. You can see I have split the wood twice both sides. A precautionary first split to see where it runs. Then a second one to get as close to the template as possible.

*Completed batoning.*

I have split the wood as close as I can to the template. It has removed a lot of wood really quickly. With a knife I remove all the excess wood around the bowl and then work on the

finishing cuts. This one isn't going to be finished by sand paper so all my cuts have to be neat and tidy. Any mistakes or bad work will be there for all to see!

*Rough cut blank ready for finishing cuts.*

Depending on how the wood is behaving I may leave it a few days for the wood to dry so it can harden and give cleaner, crisper finishing cuts. This cherry seems alright to continue working whilst green and the purpose of the spoon is to make a quick eating utensil. Square up the blank on both sides to the best of your ability before doing finishing cuts. This way you will not be trying to cut in symmetry and shaping at the same time.

*Fine shavings from finishing cuts.*

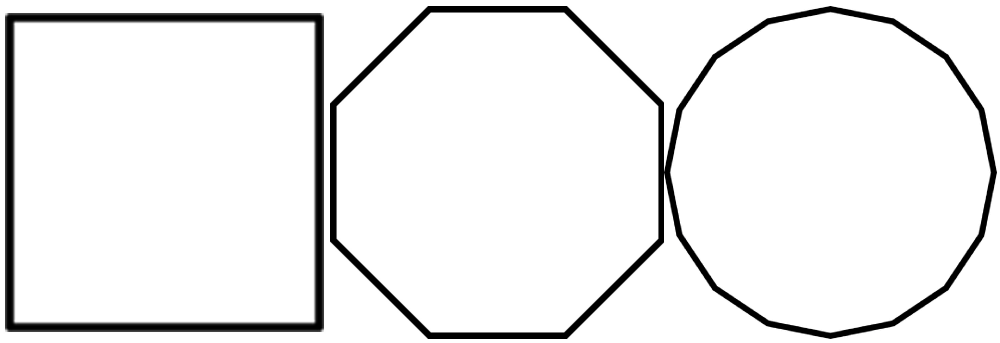
Start by reducing the bulk of the wood on the back of the bowl. It's an easy place to start and there is lots of excess wood. You can't really make any big mistakes. Knife out the general curve of the back of the bowl.

*Refining the shape of the bowl.*

When you have the basic shape of the bowl, work back along the neck and handle. Those final shaping cuts all count to the end result. I leather strop my knife regularly during the final cuts to ensure that I am always using the sharpest edge possible. This gives the cleanest cuts and won't tear the wood out accidentally.

To shape the handle, we work from the square of the spoon blank. Every side of the square must be of equal size and completely flat. You need to check that the handle isn't bent or twisted. Do this by raising the spoon up to eye level and look down the shaft of the spoon. Rotate your spoon in the hand and look at it. A bit of a twist and bend in the spoon is really common. If you don't square it up now, it will show on the finished spoon and people will spot the mistake.

Once the handle is squared up and straight, cut away one of the corners. Then do this for the other three corners. You will then be left with an octagon. Ensure that the 8 sides of the octagon are all equal size. Trim them where necessary. With a good octagonal shape, now cut away the edges of the 8-sided shape. Repeat the process of cutting away the corners and you will end up with a perfectly circular shape. You can also do this with other shaped handles such as ovals, starting with a rectangle instead of a square.



*Cutting perfect circles in wood.*

*Cooking Spoon. Spalted Birch. Sanded finish with Tung oil.*

# Cooking Spoon

Wood: Spalted Birch.

Total length: 32cm

Bowl length: 9.7cm

Bowl width: 5.7cm

Bowl depth: 18mm

Bowl angle: 30°

Handle width: 16mm at neck tapering to 11mm.

Handle depth: 15mm at neck tapering to 11mm.

This spoon is ideal for using cast iron cookware such as Dutch ovens. The large bowl and long handle are designed for big pot cooking such as stews and soups.

The same methods for making an eating spoon apply to the cooking spoon but on a larger scale. The bowl is slightly raised from the neck of the handle and the handle isn't cranked. It's tubular with a slight taper towards the end.

*Cooking spoon template ready for axe work.*

The cooking spoon also has a pointed tip on the bowl. This is so it can get to the corners at the bottom of a cooking pot, preventing the food from burning.

*Teaspoon. Willow. Knife finish with Tung oil.*

# Teaspoon

Wood: Willow.

Total length: 16.5cm

Bowl length: 4.9cm

Bowl width: 4cm

Bowl depth: 11mm

Bowl angle: 30°

Handle width: 19mm at neck for 48mm length. Then 23mm width for rest of handle.

Handle depth: 8mm at neck tapering to 6mm.

One of my earlier spoons that I hated for a long time. It was sanded and every time it got wet the grain lifted and it felt fluffy. I would need to sand it down every time after it got wet. This is really common with willow. I've since worked on the spoon again. This time leaving knife cuts and not sanding.

This seems to have solved the fluffiness problem. It's still less than perfectly shaped but it reminds me of my earlier carving.

The spoon gets used and abused every day. Left in tea for too long and chucked in the washing up bowl with the rest of the dishes. Although I hated the spoon, I've now developed a real love for it. The white willow wood has developed a beautiful patina stain from the tea. I don't have the heart to straighten up all the lines and edges and cut away all the patina. The measurements are perfect for teaspoons. Just cut better lines than I did!

*Ladle. Beech wood with knife finish and Tung oiled. Cord is elk hide and antler toggle.*

# Ladle

Wood: Beech.

Total length: 30cm

Bowl length: 8cm

Bowl width: 7cm

Bowl depth: 4cm

Bowl angle: 70°

Handle length: 23cm

Handle width: 38mm tapering to 22mm at mid-point. Then tapers out to 26mm.

Handle depth: 11mm at running full length.

*Ladle made from beech wood. Knife finish, Tung oil coating.*

Wood carving is all about creating the intangible, creating what money can't buy. Experiences and memories bound within objects, each one with their own history and story to tell. This ladle started out as an opportunity log. Often when walking in the woods you will spot clearance work. The

foresters have been using a chainsaw and have left wood in piles. They do this to encourage ecology. The rotting wood is a breeding ground for insects that other mammals will eat.

If you take only a small piece from the pile you have not destroyed the habitat and you haven't done any damage to living trees. Get permission from the landowner as taking wood is considered stealing in most countries. It's a really sustainable way to get carving wood though. It also offers exciting species and spalted wood.

This log came from a pile of beech offcuts that were being left to decompose. I'll have fond memories from the day as my son eagerly carried the heavy log throughout the woodland. It was really fun watching him wrestling it and celebrating his catch like it was a prized fish! I hope one day he will develop a passion for wood carving too.

*Opportunity log, too good to miss!*

I had a specific project in mind that I wanted to carve a ladle. There was plenty of logs suitable for spoons, but the steep angle of the bowl requires a crooked branch. This is so that the grain runs with the contours of the ladle, making it as strong as possible. We walked most of the woodland before finding a suitable log. A bit smaller than I would've liked and a branch node at the back which might cause problems, but with opportunity wood you take what you can get.

Ladles are more challenging than a regular spoon, but they become invaluable when cooking large pot stuff like soups. They look really nice too. I've included a hook on the back of the ladle so it can be hung on the side of the cooking pot during cooking. This makes life easier when out camping as you won't be looking for a makeshift table or trying to hang the ladle from a nearby tree.

Because it was opportunity wood the symmetry isn't perfect but matches the size of the log. I would've liked a slightly wider bowl that could hold more.

The ladle was knife finished. No sanding involved. This took quite a lot of careful detailed work to get the neck carved in and the hook on the back of the handle cut in properly. The finish of Tung oil darkened the pale colours of the beech and really brought the grain patterns out.

I finished it with an elk hide lanyard and antler toggle so it can be suspended if needed. I am really pleased with how it came out. A bit of a challenge but enjoyable to make and lovely to use.

# Finishing

# Finishing cuts

You will reach a stage in your spoon carving where you cannot really remove much more wood without destroying the spoon, but it still isn't quite as visually finished as you would like it to be. This is the stage where you need to do the finishing cuts. Small micro adjustments to get the spoon as perfect as possible. A spoon that is finished with a knife i.e. not being sanded, will show the skill of the spoon carver. This is what we like to aim for.

Depending on what wood you are working with and how it has behaved whilst you are carving it, you may be able to do the finishing cuts whilst it is still green. These are really small shavings that finalise the spoon. They tie up the symmetry, reduce any obvious bumps and lumps and its these small adjustments that complete the spoon. They are not big wood reducing cuts. Sometimes this process can take longer than the bulk reduction work.

You can tell whether the wood is ready for finishing cuts by how the wood is performing when you are trying to shave fine areas. If the wood is just popping off as opposed to making fine shaving curls or is tearing out in places, then the wood is too soft and needs to become harder so you can produce shaving curls. We can achieve this by letting the wood dry out.

If you still continue working a wood that cannot produce shaving curls, it's always going to look rough cut. You won't be able to get a refined, nice knife finish. A lot of people encounter this problem and then get sand paper out to solve it. This works, but it's not going to make you a better spoon carver. If you intend to have a sand paper finish, you can pretty much skip finishing cuts as the sand paper will do the final shaping for you.

Let the spoon dry completely before doing the finishing cuts. This hardens the wood and you can do much smaller, detailed work. Tapping your finger on the back of the bowl will give you an idea of if it has dried out. Rather than a heavy

thump, it will sound more like a crisp, hollow tapping sound. A spoon will dry out generally within a few days if it is stored somewhere cool and dry. Cold and high moisture will slow the process. High temperatures that drop to lows during the night will run the risk of splitting the spoon. So, keep it covered, indoors or the shade.

For the final knife cuts feel the spoon in your hand and just hold it. Are there any rough edges or sharp angles? Does the spoon feel comfortable to hold? Does it feel comfortable in the mouth? Does anything need further thinning? Keep holding and feeling the spoon, smoothing cuts and refining the final shape. Make sure you do the finishing cuts when you are feeling fresh and motivated as this will help you get the best out of it you can. Additionally, do them in daylight. Eventually there will be a point where you have nothing left that can be worked on. The spoon can be completed here, or you may want to add an oil finish. You can continue working by adding additional features like kolrosing, painting and baking your spoon which I will also cover.

# Sanding

When you are satisfied that there are no further cuts needed, the decision to leave the cuts or sand them smooth has to be made. I make that decision based on what the spoon shape is, what the wood grain is like and what is most likely to improve the overall look. Some people are really against sanding, saying that spoons must be knife finished and at most scraped with a cabinet scraper. The criticism is that sanding rips the fibres of the wood, making it fluffy and puts grit in the grain.

Sanding has its place and can really compliment a spoon. And, honestly speaking, sanding can hide mistakes in knifework and correct errors in shaping. This is why a lot of good spoon carvers no longer sand their work, they want to show the skill of the knife cuts. I like a sanded finish mainly when I am trying to show the grain of the wood. This works particularly well with wood burrs and spalted wood. I like to bring them up to a high finish which is smooth and shiny. This really brings out the grain patterns in the best possibly way.

If you choose to use sandpaper, then working through the grits carefully is key. If you jump up the grits without doing a proper job, your work will be patchy with visible rough spots. 60 grit is great for final shaping. It removes wood quickly but is too course for a final finish. Use 60 grit until you are happy with the shape. Rinse the spoon in water. This will get rid of any dust in the grain and will raise the grain making it fluffy. This will also show out any places you have missed. 120 grit requires a little more work but doesn't seem as brutal on the wood.

Let the spoon dry and see if any more areas need doing. Re-sand, rinse, and dry until the sanding is even, and the grain is no longer rising giving a fluffy feeling. Then work up the grits 120, 240, 400, 600, 800, 1200. When you get to 600, I use a bowl of water and use the paper as a wet and dry. This unclogs the sandpaper so when it gets clogged up, I dip it in the bowl of water and rinse the wood dust out. Bringing it up

to a 1200 grit will give you a very smooth and shiny finish. Almost like a lacquer or wax has been applied.

# Oiling

You can choose not to oil the spoon, it will give it a natural look, but wood is porous and will ‘sweat’, especially with hot water. Something to block the pores is recommended. There are also various wood stains to bring interesting colours to your spoon you may want to explore.

Food grade linseed/flaxseed oil is a popular choice, as is Tung nut oil. These oils polymerise into a solid state, drying to a strong solid film. Whereas vegetable oils for example, are non-drying and are considered a wood treatment, not a wood finish. There is a curing period with oils where you shouldn’t use the spoon. They need time to fully cure. I have also used Danish oil in the past; a mixture of oils, varnish and fast drying chemicals. Each manufacturer makes their own Danish oil to different specifications and it’s hard to know exactly what’s in it as they generally don’t list the ingredients. There is also the compelling argument that the additives used to speed up the curing process are toxic and not food safe.

I generally use Tung nut oil for finishing my spoons. It’s 100% natural so there are no additive toxins. If you are considering selling your spoons you must include that you have used a nut oil to warn anyone who is potentially allergic. I don’t generally sell my spoons although they are gifted out to friends and family who I know are not allergic to nuts.

To oil the spoon simply put a few drops of Tung nut oil into the bowl of the spoon then massage it all over the spoon. You want a good thick layer to ensure that it gets all over the spoon. Then let it soak in for 20 minutes or longer. Come back and wipe off any excess oil that is still sitting on the surface. Leave for a few days so that it dries out then coat it in oil again using the same method as before. Put as many layers on in this method as you wish. When you have done the final layer leave the spoon out in daylight somewhere for as long as your patience allows. Ideally indoors on a windowsill is perfect. This will dry and harden the Tung oil. I have very little

patience and wouldn’t let a spoon dry for months. They’re lucky if they get a few weeks.

You can tell if the Tung nut oil has dried if you can no longer smell it. I find Tung nut has a lovely smell not too different to peanuts. Also, if you use the spoon and can taste the Tung nut oil then it hasn’t dried.

# Burnishing

Once the oil is dried the spoon needs burnishing. This is where you take a hard, smooth object like a pebble or antler and rub it firmly all of the spoon. This compresses the wood fibre down, makes the spoon feel smoother and will bring up a sheen to the finish. Don’t use any hard-edged objects as they will leave deep compression marks that look like scratches. Also be careful what you use. Some objects might transfer their colour to the spoon or if it is a rough texture, will scratch the surface of the spoon.

# Kolrosing

*Kolrosed arrow symbol.*

To further personalise your spoon, you can add some kolrosing. This is basically engraving patterns into the spoon using your knife. Once you have finished the knife, oiled and burnished it, it will be ready to carve in some patterns. Take inspiration from wherever you like, there are loads of internet images of kolrosed spoons with all sorts of patterns.

It's important that you cut the pattern in after you have oiled and burnished the spoon. This has compressed the wood fibres, so you get a sharper, cleaner cut for the pattern. The oil will have sealed the wood so when you come to seal the filler material of the pattern, it won't bleed into the wood and keeps a sharp edge.

Practice drawing the pattern on paper first until you are happy that you can do it confidently. Then draw it in pencil onto your spoon. In this instance I used an arrow image taken from Native American symbology meaning 'protection'.

Cut along the pencil lines to open up the wood. Your mora 106 or equivalent will do this, but a different profile knife is better and cleaner, which is essential for complex shapes.

*Ben Orford carving knife.*

I have a Ben Orford carving knife for detailed work. Notice how the cutting edge is completely flat the entire length of the blade? This helps to pierce the wood better than a mora 106 or similar. The knife can also be used for chip carving. Kolrosing is cutting lines into the wood, chip carving is cutting chips out to make patterns. You don't need to buy a Ben Orford knife specifically, it's the profile and shape that helps and there are several kolrosing knives and chip carving knives on the market.

Once you have cut your lines into the wood they will need to be filled with a powder. Some people use nutmeg powder, charcoal dust and all sorts. Anything that is a very fine powder and will not dissolve when wet. Push the powder into the lines so it fills them totally. After this is done seal the powder by wiping oil over the top. Tung nut oil will harden the powder. Then once the oil is dry burnish the spoon again.

An extension of kolrosing is scrimshaw work. If you decide to inlay bone or antler into a spoon, you can etch it with decorative patterns. It's a similar process to kolrosing except that you are scratching the bone or antler. You can't really cut into it and it won't open up fibres like wood does.

*Kuksa with scrimshaw handle.*

For a friends Christmas present I made a Sami kuksa based on an original displayed in the Scott Polar Museum in Cambridge. It has an antler topped handle with scrimshaw pattern. I have also written a book on kuksa carving which gives instruction on how to make them and several different templates if you are interested in exploring them. They're really good fun to make and I recommend you have a go making your own.

# Painting

Painting and wood dyes add another dimension to finishing a spoon. The Neolithic moose spoon I replicated was finished in a wood dye. The cherry wood used for carving it was too light compared to the replica, so I decided to dye it. The Raven potlatch spoon was also dyed and painted with acrylics to make the features stand out. Milk paints are popular with spoons currently as they give an old-fashioned rustic look to spoons. The problem with paints is that they can eventually wear off or chip. If you are just looking to darken the wood, then you can try baking it in an oven.

# Baking

*Kayak style spoon. Oven baked and Danish oil finish.*

When you put a spoon in the oven and heat it to around 170c (338f) it will darken. This can give a really nice finish. Especially to an otherwise boring, pale wood like hazel for example. Do **not** oil your spoon beforehand as this will cook and probably burn the oil. Put your spoon on a tray in a cold oven and turn the oven on. Set the oven to a low heat. This will slowly heat the spoon and not thermal shock it. If you just chuck the spoon into a hot oven you run the risk of thermal shocking it and seeing cracks and splits quickly appear. By heating the spoon up slowly, you greatly reduce the chances of splitting. Once your oven has reached the low heat, take a quick look at the spoon for any cracks or splits that may be appearing. If none appear, then you can slowly increase the temperature.

Check on the spoon regularly as the oven heat up to ensure that everything is ok. When the spoon starts to darken, don't raise the temperature further. The longer you leave the spoon in the oven, the darker it will get. If you do continue to turn up the temperature, you run the risk of burning your spoon. There will be spots on the wood that are very thin e.g. the bowl which will heat up and darken quicker than the handle. This will burn first. I have also had wood turn into a smouldering

ember, so it does run a fire risk. This method takes care and attention to ensure you don’t burn the spoon and cause a fire!

# Care

Wash by hand using a scrubbing brush in the direction of the grain. Do not dishwash or leave in the water for long periods of time. Rinse in clean water to remove all detergents. Pat dry or let air dry. Don’t leave spoons wet in a drawer or in storage as this will promote mould.

Occasionally oil the spoon with something like Tung oil if it is looking a bit worn out and dry. Let the oil fully dry before using the spoon. It may take several coats to bring it back to a good condition.

Most importantly use and enjoy your spoons! If you are gifting or selling them, let the new recipient know how to care and prolong the life of the spoon. Who knows, maybe you will inspire them to start spoon carving too!

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