



**WOODWORKING**

Resource  
Guide



**Welcome to *Canadian Woodworking***

To ensure that you get the most from your subscription, we have developed this Woodworking Resource Guide to provide brief descriptions and easy access to many helpful articles, projects and premium videos available at [www.canadianwoodworking.com](http://www.canadianwoodworking.com).

## WOODWORKING

# Resource Guide

## How to use this guide

**Articles:** There are links to a wide range of skill-building articles grouped into 11 categories. All the articles can be viewed online.

**Videos:** Our exclusive instructional videos are for subscribers only.

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### Other ways to benefit from *Canadian Woodworking*

Sign up to receive our free monthly ShopNEWS newsletter that provides the latest woodworking news, product reviews, free project plans, coming events, videos and more. There's no spam, no annoying offers and you can unsubscribe at any time.

We also host Canada's only online woodworking forum, where members can discuss and share ideas on a wide range of woodworking topics. Registration is free and signing up is easy.

If you have any questions about our content or offerings, please email [editors@canadianwoodworking.com](mailto:editors@canadianwoodworking.com).

### About *Canadian Woodworking*

Founded in 1999, *Canadian Woodworking & Home Improvement* magazine is published 6 times a year by Sawdust Media Inc., PO Box 808, Niagara on the Lake, ON L0S 1J0. This Woodworking Resource Guide draws from our extensive library of past magazine issues, our ever-increasing web content and our vast selection of videos.

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# 1 | Understanding Wood

These articles will help you understand the nature of wood and how to use it to your best advantage.



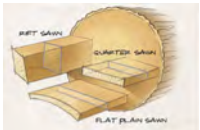
## **Dealing With Wood Movement**

Wood movement is inevitable. However, there are many design and building options to help a craftsman work with it – not against it.



## **Moisture Meters**

Use a moisture meter to help you determine the precise moisture level of your lumber.



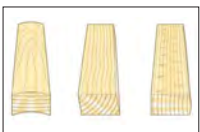
## **Wood Cuts & Shrinkage**

The location of a specific cut in a log determines its grain pattern or figure. Let's look at wood shrinkage, and the effect that drying has on the various cuts.



## **Wood Science: Wood Cuts and Where They Come From**

Many of you have heard the terms "flat-sawn", "rift-sawn" and "quartersawn" lumber. Yet you might not understand what these terms mean, or where these various cuts of wood come from.

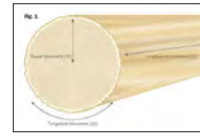


## **Wood Science: Wood Cuts and How They React to Moisture**

This article covers how moisture affects the shape of different cuts of wood.

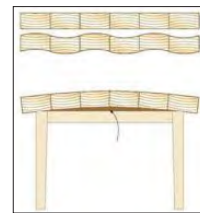
## **Wood Science: Wood Movement**

We didn't invent wood. We invented plywood, particleboard, oriented strand board, medium density fibreboard, and a whole host of other materials, but wood – in its simplest form – was not invented by us.



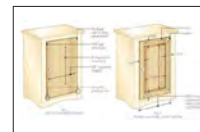
## **Wood Science: Table Tops and Wood Movement**

Most people have seen one form or another of failed tabletops. Sometimes they crack down the middle. Sometimes they are so badly warped that they've pulled screws right out of the aprons below. These failures can be attributed to one phenomenon: wood movement.



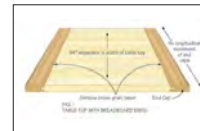
## **Wood Science: Frame and Panel Design**

This article discusses how wood science affects doors, specifically the frame-and-panel design.



## **Wood Science: Solutions to Cross-Grain Problems**

Breadboard ends are good at giving a project that finished look. However, it's important to understand how to construct breadboard ends properly to avoid cross-grain problems.



## **VIDEOS**

### WOODWORKING BASICS

#### The Benefits of Using Veneer

(FOR SUBSCRIBERS ONLY)



### WOODWORKING BASICS

#### Introduction to Veneer

(FOR SUBSCRIBERS ONLY)



### WOODWORKING BASICS

#### Different Cuts of Wood

(FOR SUBSCRIBERS ONLY)



### WOODWORKING BASICS

#### What is a Board Foot

(FOR SUBSCRIBERS ONLY)



### WOODWORKING BASICS

#### How Sheet Goods are Sold

(FOR SUBSCRIBERS ONLY)



## 2 | Methods of Joinery

These articles will help you master the core joints that are a fundamental part of woodworking.



### **Rabbets, Dados and Grooves**

Rabbets, dados and grooves are basic forms of joinery found in most woodworking projects. Learn how to do them correctly to give your woodworking skills a solid foundation.



### **Dowel Joinery: Simple, Strong and Accurate**

Using dowels for joinery can be a strong and accurate method. It's also generally a simple technique to master. Woodworkers tend to avoid dowels for a number of reasons, even though they are perfectly capable of making you a better woodworker and your furniture stronger.



### **Hand Cut Dovetails**

Cutting dovetails with hand tools can be a relaxing and extremely rewarding experience. The fine pins and custom layouts of hand-cut dovetails also elevate your work to a higher level.



### **Bridle Joint**

Learn to make this simple but strong joint that has many applications in your woodworking.

### **Joinery Overview**

Joints are a fundamental part of woodworking. They have the practical function of joining pieces of wood together into a finished project while they can also provide a decorative element to your work.



### **Dovetails**

While dovetail joints are most often praised for their aesthetic appeal, their real claim to fame is the mechanical strength that they offer when two boards are joined at a corner.



### **Mortise & Tenon**

The mortise and tenon joint offers exceptional strength, resisting racking and twisting forces better than most other joints while providing an ample glue surface.



### **Lock Mitre**

In addition to using the router to help make traditional joints, you can use the router and a single bit to make unique joints that solve specific joinery issues.



### **VIDEOS**

#### Introduction to Joinery



#### Edge and Face Joints

(FOR SUBSCRIBERS ONLY)



#### Rabbit Joints

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#### Dado and Groove Joints

(FOR SUBSCRIBERS ONLY)



#### Pocket Screw Joints

(FOR SUBSCRIBERS ONLY)



#### Dowel Joints

(FOR SUBSCRIBERS ONLY)



## 2 | Methods of Joinery

These articles will help you master the core joints that are a fundamental part of woodworking.



### **Stopped Dado Joint**

A stopped dado provides the same strength and flexibility that a dado joint does, however, it hides the dado itself for a cleaner look on the fronts of bookshelves and other similarly constructed projects. It doesn't require much extra work and in the long run is easier than adding a facing strip or veneer to hide the joint.



### **Wedged Mortise & Tenon**

The mortise and tenon (M&T) is a classic joint with lots of strength, although it is usually hidden. On the other hand, this wedged M&T joint is designed not only to be visible, but to be a design element as well. You can use it for knock-down furniture or glue it for a permanent joint.



### **Splined End Mitre Joints**

Mitre joints are an attractive joint often used in framework for cabinets and cabinet doors, picture frames, and box lids — wherever you don't want to see end grain at a corner joint.



### **Lap Joint**

Lap joints are used where two or more pieces meet or cross, enabling you to keep the surfaces of the two pieces flush while improving the strength of your assembly. This includes frame members in a cabinet, legs that cross (to add some style) and other support pieces.



### **Frame & Panel**

The frame and panel (F&P) joint is typically used for doors in cabinets.



### **Tongue & Groove**

The tongue and groove (T&G) joint is primarily a structural edge-to-edge joint.



### **VIDEOS**

#### Mitre and Bevel Joints

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#### Tongue and Groove Joints

(FOR SUBSCRIBERS ONLY)



#### Mortise and Tenon

(FOR SUBSCRIBERS ONLY)



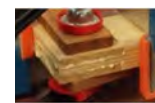
#### Lap Joints

(FOR SUBSCRIBERS ONLY)



#### Bridle Joints

(FOR SUBSCRIBERS ONLY)



#### Sliding Dovetail Joints

(FOR SUBSCRIBERS ONLY)



## 3 | Gluing

Knowing which glue to use and how to properly apply clamps is essential to a project's success.



### Gluing Techniques

Gluing is critical to a project's success. Sloppy gluing can lead to open joints, out-of-square corners and lots more. At the very least, it will lead to poor staining and finishing results, so learning proper gluing techniques is sure to pay off.



### Easy Steps to Gluing

Successful gluing depends on many factors. Good surface preparation is key, as is correct glue application. You also need to choose and apply the right number of clamps for the correct length of time.



### Gluing Strategies

Glue-ups don't have to be nerve-wracking experiences. Some basic material and adhesive knowledge, coupled with lots of planning, will go a long way to ensuring smooth gluing.



### Glues

Each glue has a specific purpose. Knowing which glue to use, and how best to use it, comes with understanding and experience.



### VIDEOS

#### WOODWORKING BASICS

#### Six Common Adhesives for Woodworking

(FOR SUBSCRIBERS ONLY)



# 4 | Wood Finishing

You'll find a wealth of information, tips and techniques to help you select the right finish for your projects.



## **Finishing Isn't an Afterthought**

For novice woodworkers, learning about wood finishes and how to apply them is just as important as developing wood processing and joinery skills.



## **Finish Touch: Penetrating Oil Finishes**

Ease of application, lack of film build-up, a beautiful satin sheen and no-fuss repair make these finishes ideal for projects that won't be subject to a lot of heavy daily use.



## **Finishing Touch: Brushes for Applying a Finish**

You can get beautiful results applying film finishes – shellac, varnish, polyurethane, waterborne and lacquer – with a brush. But to do so, you need to select the right brush and use the right technique.



## **Finishing Touch: Dye Stains**

Dyes can open up a whole new world for colouring wood.

## **Finishing Touch: Hand Sanding**

Sanding by hand is a simple enough technique, but one that is important for achieving the perfect finish.



## **Finishing Touch: Hardwax Oil**

If you're looking for a no-fuss, easy-to-maintain, high-quality finish, hardwax oil just might be the ticket.



## **Finishing Touch: Pore Fillers**

To get a glass-smooth, highly reflective finish on open-grained wood, such as ash, elm, hickory, mahogany, oak or walnut, use a pore filler.



## **Finishing Touch: Powered Sanding**

Sanding with a power tool is the first and most efficient step for creating a surface that's ready for accepting a finish. Here's an overview of the different hand-held sanders on the market today, and a description of what jobs they excel at.



## **Finishing Touch: Sandpaper**

A great finish starts with proper sandpaper selection.



## **VIDEOS**

### **WOODWORKING BASICS**

## **Why Apply a Finish**

(FOR SUBSCRIBERS ONLY)



### **WOODWORKING BASICS**

## **Application Options for Finishing**

(FOR SUBSCRIBERS ONLY)



# 4 | Wood Finishing

You'll find a wealth of information, tips and techniques to help you select the right finish for your projects.



## **Finishing Touch:** **Shop Made Finishes**

Make your own finish without the thick build-up common to film finishes.



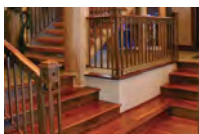
## **Finishing Touch:** **Staining**

Don't listen to the naysayers. Staining can be an easy, straight-forward process.



## **Finishing Touch:** **Thinning Finishes**

Let's clear up some of the issues around thinning common wood finishes.



## **Finishing Touch:** **Waterborne Finishes**

Waterborne finishes have improved quite a bit over the past few years – to the point where they make an excellent finish for just about any woodworker.



## **Healthy Clear Coatings:** **What They Are, How They Work and Why You Should Use Them**



## **Solvents**

Solvents are useful products that can make the finishing process easier. But, they need to be treated with caution and common sense.



## **Tung Oil: Debunking the Myths**

Take a closer look at this common finish. There are many things we can all learn about this ancient, misunderstood substance.



## **Which HVLP Spray Finishing System is Right for You?**

The world of spray finishing can seem daunting at first. Learn about the different types of HVLP spray systems so you can make a purchase with confidence.



## **Basics of Spraying**

After the many hours spent carefully building a project, it's only natural to want to give it the best finish possible. Unfortunately, it seems that a lot of woodworkers find the finishing phase of a project to be messy, difficult, unsatisfying and tedious.



## **VIDEOS**

WOODWORKING BASICS

### General Finishing Tips

(FOR SUBSCRIBERS ONLY)



WOODWORKING BASICS

### A Few of My Favourite Finishes

(FOR SUBSCRIBERS ONLY)





# 5 | Tool Sharpening

Sharp tools make for easier and more accurate, enjoyable woodworking. They require much less effort to use, and the cuts they make are more precise, crisper and cleaner.

These articles help you learn the skills necessary to maintain your plane blades, chisels, shop knives and other cutting tools.



## **8" Bench Grinders**

When it comes to putting a new bevel on a chisel or repairing a chipped plane blade, most woodworkers will gravitate to the bench grinder.



## **Make Sharpening Easier with Diamond Stones**

Sharp tools make woodworking easier. One of the easiest and quickest ways to do the job is with diamond stones.



## **Preparing Plane Irons**

Learn to prepare and maintain your plane irons, because a sharp iron can make the difference between frustration and enjoyment.



## **Sharpening Carving Gouges**

Tuning and sharpening your gouges is vital to your success and overall enjoyment in carving.



## **Sharpening for Carvers**

Without a doubt, sharpening is a skill that many carvers (and other craftsmen who work with wood) pursue endlessly with varying degrees of success. Until a carver finds the right method, hours of extra hard labour and frustration are inevitable. Ultimately, many people simply stop carving because their tools just don't work.



## **Waterstones**

Tips on using waterstones.



## **VIDEOS**

### **WOODWORKING BASICS**

## A Woodworkers First Seven Sharpening Tools

(FOR SUBSCRIBERS ONLY)



# 6 | Routing

Routers are essential power tools for joinery edge treatment, and pattern work.



## **Rabbets, Dados and Grooves**

Rabbets, dados and grooves are basic forms of joinery found in most woodworking projects. Learning to do them correctly will give your woodworking skills a solid foundation.



## **Routing Basics - Part 1**

Perhaps no more than 40 or 50 years ago, grooving, decorative edge work and intricate joinery in most small wood shops would have been done by a wide range of hand tools.



## **Routing Basics - Part 2**

The router is one of the few tools that comes fully set up and ready to go right out of the box. Insert a bit into the collet, set the depth of cut and you're ready to start routing.



## **Routing Basics - Part 3: Straight Bits**

The ability to quickly change the bit in a router is one of the features that makes it such a versatile tool in the workshop. In a few moments, you can switch from a joinery bit to a decorative edge-profiling bit.

## **Routing Basics - Part 4: Edge Profiling Bits**

While square edges on furniture projects are commonplace, they don't have to be the first or the last choice in edging. A decorative edge can add considerable visual appeal to any project. The choices for edge-forming bits are almost endless and the bits relatively simple to use; following some straightforward guidelines will guarantee success even for a first-time user.

## **Routing Basics - Part 5: Joinery Bits**

Without a bit, the router is just a fancy paperweight; but when you slip one of these joinery bits into the collet you unlock the potential of creating a multitude of strong and attractive joinery options for your projects.

## **Routing Basics - Part 6: Specialty Bits**

A basic selection of straight, edge profiling and joinery bits will handle just about all your routing needs. But for jobs that are a bit out of the ordinary, you need a different kind of router bit.



## **Template Routing**

You'll be able to quickly machine multiple parts – always the same size and shape – by learning these template routing fundamentals.

# 7 | Home Improvement

Here are information, tips, and techniques to help you successfully plan and undertake your next home improvement project.



## **Board & Batten Wood Siding**

Vertical wood siding is a time-proven, versatile, environmentally friendly, locally available option that requires minimal tools and equipment to install.



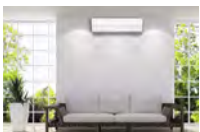
## **Classic Wainscoting**

Add charm, character and visual appeal to any room with the classic look of wainscoting.



## **HomeInOn: Countertops**

The kitchen is the heart of the home. It's a central meet-up place for food preparation, meals and informal discussion. The countertop gets a lot of use and is a focal point in the room, so choosing the right style is important for function and aesthetics.



## **HomeInOn: Ductless Heat Pumps**

Here's a way to add a heating and cooling system for homes that lack ductwork and for new high-energy-efficient homes.

## **HomeInOn: Flooring**

Floors can take quite a beating, especially in high traffic areas like entrances and kitchens. Choosing the right flooring for the different areas of your home is important for comfort and durability, as well as for aesthetic and financial reasons.



## **HomeInOn: Home Insulation Options**

Optimizing the energy efficiency of your home includes proper insulation.



## **HomeInOn: Roofing Material Options**

Is your roof looking its age? Is there moisture seeping into the attic or crawl space? If so, it might be a sign that a new roof is in the cards. We'll walk you through the top six roofing materials.



## **HomeInOn: Shop and Garage Floor Coverings**

Concrete and plywood are common options for shop floors, but concrete may be too hard on your body, while plywood likely isn't durable enough to stand the test of time. Learn about other options that can be used to support you and your machinery for years to come.



# 7 | Home Improvement

Here are information, tips, and techniques to help you successfully plan and undertake your next home improvement project.



## **HomeInOn: Siding**

There are a lot of great choices when it comes to siding your new or existing home, garage or workshop. Learn more about the pros and cons of the most popular materials so you can make an informed choice.



## **HomeInOn: Tankless Water Heaters**

On-demand hot water systems save space, energy and money.



## **HomeInOn: Window Film**

Applying heat control film on southerly facing windows is an inexpensive and easy way to keep rooms cooler in summer and warmer in winter.



## **How to Measure for and Cut Custom Exterior Stair Stringers**

With a logical approach and a little know-how, creating custom stair stringers can be an efficient and enjoyable project.

## **Installing Corwn Moulding - Part 1**

Of all the trim work in a house, there is probably nothing that has more impact on a room than crown moulding.



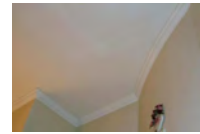
## **Installing Crown Moulding - Part 2**

Sloped ceilings are quite popular and installing crown moulding really adds to the value and beauty of a home.



## **Installing Crown Moulding - Part 3**

Placing crown moulding on curved walls can seem like an impossible challenge. Follow these simple tips to achieve great results.



## **Introduction to Interior Trimwork**

Learn about the terms, tools, materials and equipment necessary for installing or replacing interior trim work.



# 7 | Home Improvement

Here are information, tips, and techniques to help you successfully plan and undertake your next home improvement project.



## Levelling a Problem Floor

From carpenters to floor installers to homeowners, nobody likes an uneven floor. Learn a few tips on how to level a floor before laying a new floor. Once the job is complete, you'll be thankful you spent the extra time.



## Restoring a Historic Porch with Custom Details

Attention to heritage details is the key to restoring this porch and maintaining the original look of the home.



## WINDOW WISE: A Guide to Planning, Framing and Installing a New Window

With only basic tools, it's possible to add a window to your home with relative ease. At its easiest, this is a job any DIYer can handle. On the other hand, if things aren't stacked in your favour, here are some tips on how to decide if this project is something you should take on.



## Wood Sidewall Shingles - Mastering the Basics

Wood shingles add style, texture and durability to any sidewall, so consider this option the next time you have some siding to add to your home or shed.



# 8 | Woodworking Safety

Working safely at home, in the shop or on the job site should be a number one priority with everyone.



## Top 10 Dust Collection Tips

Unless you're using only hand tools and don't sand any of your surfaces, you're creating dust in your workshop. Dust is a carcinogen when it's inside your lungs. The smaller the particle, the deeper it can go in your lungs, and the more damage it can do in the long run. Don't take a chance with your health. Follow these tips to ensure your dust collection is up to this important, yet often overlooked, task.



## 10 Safety Items That Belong in Every Shop

Woodworking is a lot of fun as long as you don't hurt yourself.



## Ambient Air Cleaners

It's a simple fact: The more time you spend in your shop, the more dust you inhale. For maximum dust control, we recommend using an ambient air cleaner in conjunction with a primary dust collection system, supplemented by personal dust protection when appropriate.



## Cyclone Dust Collectors

If you're looking for a highly efficient, whole-shop dust collection system, consider a cyclone collector.

## Dust Collection for the Home Shop

There is one thing that all woodworkers share no matter what aspect of woodworking they participate in – as long as you are working with wood, you need to clean up a mess.



## Power Face Shield Respirators

For maximum eye and lung protection, nothing beats a powered face shield respirator.



## Push Stick for Ripping

One of the most daunting woodworking shop tasks is ripping stock or parts on a table saw, especially when the stuff is small and/or close to the rip fence.

This simple push stick will calm your mind, give you confidence and allow you to better control the workpiece while making ripping operations.



## Reduce Dust From Your Bandsaw

These days, most of the bandsaws produced by the major manufacturers have some sort of hook-up for dust collection. However, most of them are set up for vacuum cleaner hook-ups and are usually not of sufficient size to hook up to an effective dust collector.



## VIDEOS

### WOODWORKING BASICS

### A Woodworkers First Seven Safety Items

(FOR SUBSCRIBERS ONLY)



### Shop Safety

When planning a new shop (or upgrading your current shop), it's a good idea to consider both safety and convenience. This article outlines ways to enhance shop safety and make it more user friendly, without incurring substantial costs.

## 9 | Furniture Styles

Recognizing the elements that make up a particular style will help you to improve your own designs.

These six styles have set the trend in home decor over the past 300 years.



### **Chippendale**

After the Shaker, Chippendale is perhaps the best known North American style. Named after Thomas Chippendale, the style was derived from English, French and Chinese designs.



### **Colonial**

Defining furniture styles can be very difficult. Defining "American Colonial" is a good example of just how difficult it can be.



### **Mission**

The Mission style was developed by a number of influential designers in order to create a simpler, more craftsman, look. Their rustic designs were a reaction to the strong ornamentation flaunted in the Victorian style that preceded it.



### **Shaker**

"Fancy articles of any kind, or articles which are superfluously finished, are not suitable for believers, and may not be used or purchased." — From The Millennial Laws of 1845.

### **Sheraton**

The Sheraton style of furniture is named after Thomas Sheraton, an English designer.



### **Victorian**

The Victorian style was named for Queen Victoria, who reigned in England from 1837 to 1901. While the Victorian style was influenced by earlier styles, its general characteristics remained the same.



### **Historical Overview**

Understanding furniture styles can help you bring your woodworking to the next level by providing insight into what makes furniture look good.



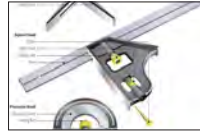
10

# | Know Your Tools

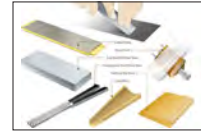
Our illustrated tool primers tell you what you need to know about basic woodworking tools and accessories.



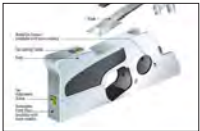
Block Plane



Combination Squares



Sharpening Stones



Shoulder Planes



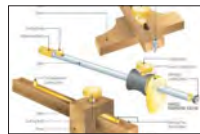
Japanese Saws



Spokeshaves



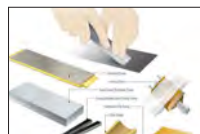
Chisels



Marking & Cutting Gauges



Western Style Handsaws



Rasps and Files



10

# Know Your Tools

Our illustrated tool primers tell you what you need to know about basic woodworking tools and accessories.



**Bandsaw**



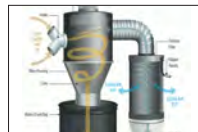
**Cordless Drill/Drivers**



**Random Orbital Sanders**



**Belt Sanders**



**Cyclone Dust Collectors**



**Routers**



**Benchtop CNC Routers**



**Dado Sets**



**Table Saws**



**Brad Nailers**



**Drill Press**



**Thickness Planer**



**Chainsaws**



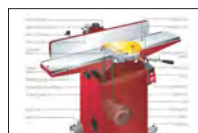
**Hollow Chisel Mortiser**



**Track Saws**



**Compact Air Compressors**



**Jointers**



**Trim Routers**



**Lathes**

# 11 | Workshop Posters

Whether you're new to the craft, or a seasoned veteran, you'll find these downloadable posters chock full of useful information.



**Measuring tools**



**Bench Clamps**



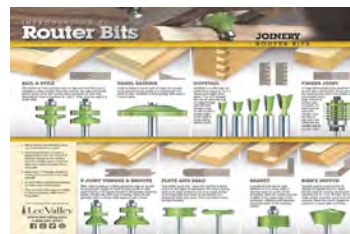
**Drill Bits**



**Hand Planes**



**Hand Saws**



**Router Bits: Joinery**



**Router Bits: Profile/Edge**



**Router Bits: Specialty**



**Router Bits: Straight**



**Saw Blades**



**Sharpening**



**Wood Finishing**