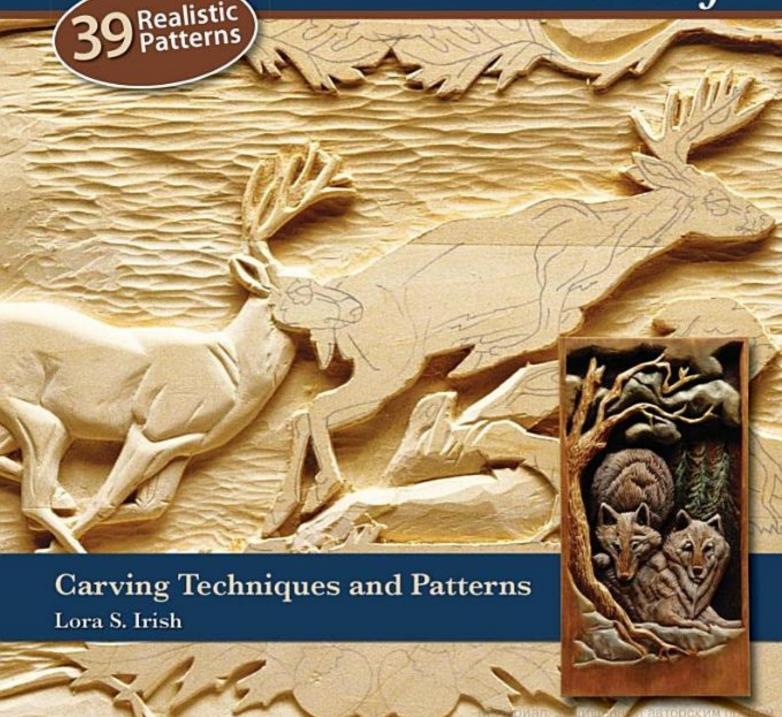
WILDLIFE Second Edition Revised & Expanded CARVING in Relief 39 Realistic 39 Patterns





WILDLIFE Second Edition Revised and Expanded CARVING in Relief

Carving Techniques and Patterns

By Lora S. Irish

Watchful Eyes is deeply carved into a 2"-thick basswood blank. (Patterns on pages 128–129.)



Acknowledgments

Special thanks go to Alan Giagnocavo, John Kelsey, Troy Thorne, Paul Hambke, Dan Clarke, Liz Norris, and everyone at Fox Chapel Publishing who worked on this project. Your encouragement and support throughout the revision of this book has been indispensable. Once again, your organization and professionalism make working with your creative team a delight.

-Lora S. Irish, July 2009

@ 2009 by Lora S. Irish and Fox Chapel Publishing Company, Inc.

Wildlife Carving in Relief is an original work, first published in 2000 and revised in 2009 by Fox Chapel Publishing Company, Inc. The revisions include new patterns and a new gallery of wildlife portraits. The patterns contained herein are copyrighted by the author. Readers may make copies of these patterns for personal use. The patterns themselves, however, are not to be duplicated for resale or distribution under any circumstances. Any such copyrig is a violation of copyright law.

ISBN 978-1-56523-448-2

Library of Congress Cataloging-In-Publication Data

Irish, Lora S.

Wildlife carving in relief / by Lora 5. Irish. -- 2nd ed, rev. and expanded.

p. cm.

Includes index.

ISBN: 978-1-56523-448-2

1. Jig saws. 2. Woodwork-Patterns. 2. Wildlife art. I. Title.

TT186.175 2009

745.593--dc22

2009025836

To learn more about the other great books from Fox Chapel Publishing, or to find a retailer near you, call toll-free 800-457-9112 or visit us at www.FoxChapelPublishing.com.

Note to Authors: We are always looking for talented authors to write new books in our area of woodworking, design, and related crafts. Please send a brief letter describing your idea to Acquisition Editor, 1970 Broad Street, East Petersburg, PA 17520.

> Printed in China First printing: September 2009

Because carving wood and other materials inherently includes the risk of injury and damage, this book cannot guarantee that creating the projects in this book is safe for everyone. For this reason, this book is sold without warranties or guarantees of any little, workersed or implied, and the publisher and the author disclaim any liability for any injuries, losses, or damages caused in any way by the content of this book or the reader's use of the tools needed to complete the projects presented here. The publisher and the author urgs all carvers to thoroughly review each project and to understand the use of all tools before beginning any project.

INTRODUCTION

Wildlife is a favorite theme for woodcarvers. There is such a wonderful variety of animals and birds that there seems to be an unending supply of ideas and patterns for carving scenes. So, if you will join me, we will go through wildlife portrait carving step-by-step, from the original pattern design to a finished stained carving ready for display in your home.

The designs in this book are shown in two different formats. The first is the basic outline pattern for tracing, which includes the fine detailing needed to guide you in your gouging cuts or woodburning strokes. The second format is a pencil illustration that will help you find the depths and levels within each design. Together the outline pattern and illustration will give you a clear idea of how your carving will look when completed.

Wildlife carvings provide an excellent theme to explore different styles of woodcarving. Animal scenes are adaptable to low relief carvings, which are created in one-quarter inch or less depth of wood. These very shallow works emphasize the carved scene or pattern. High relief with wildlife can take on a three-dimensional look, allowing elements to be freed from the background wood and deep undercuts to be made in the work.

Wildlife carving today focuses on realism.

Carvers work to make each area of the carving as true to nature as possible. You will have a chance to explore all of these woodcarving styles and more as you work through the chapters of this book.

Whether you are a beginning or a veteran carver, wildlife work can create fascinating, completed projects. As you work, you will discover a number of simple techniques and cuts that can be applied to any carving work you may do. Animals are very forgiving in their pattern nature and need few straight lines and sharp angles. Small imperfections in the outline work soon disappear with the detailing of the fur or hair. Animals also provide a wonderful chance to explore the numerous ways to add texturing to your carving projects.

I sincerely hope you enjoy your adventure into wildlife relief carving.

Lora S. Irish c/o Fox Books 1970 Broad Street East Petersburg, PA 17520

Editor's Note: Lora and her husband, Mike, maintain a website for carvers—

www.carvingpattems.com. There you will find patterns to purchase and many free patterns as well. Categories range from wildlife to landscapes, florals, fantasy, and chip carving. Lora and Mike also have a number of tutorials on their site, including how to sharpen, how to make cuts, and how to finish a project.

Step-by-step tutorials are offered for several



TABLE OF CONTENTS

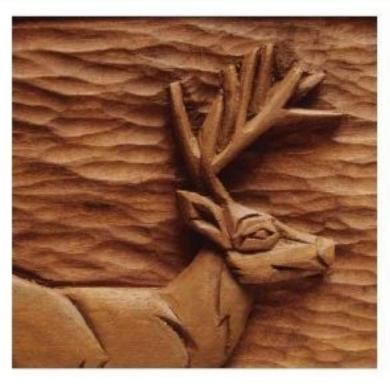
What You Can



Learn From This Book 8
Chapter One:
Relief Carving Basics 11
Relief Carving Patterns
Relief Carving Woods
Transferring the Pattern
Carving Tools
Basic Carving Cuts
Chapter Two:
Advanced Techniques 29
Relief Carving Styles
Greating Shadows
Chapter Three: Special Techniques for Wildlife Facial Features
Facial Features
Fur and Hair Texture
Feathers
Chapter Four: Carving the Buffalo Portrait 47
Pattern: Buffalo Portrait
Getting Started
Step-by-Step Tutorial
Chapter Five: Finishing Touches 61
Woodburning
Danish Oil Finish 67
Wood Stain
Dry Brushing

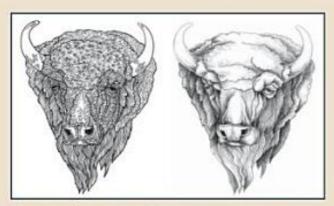
Introduction......5

Chapter Six:
Patterns and
Illustrations73
Animal Portraits
Antique-style Buck 74
Buck Portrait
Elk Portrait 78
Grizzly Portrait80
Moose Portrait 82
Mountain Goat Portrait 84
Mountain Lion Portrait 86
Native Spirit 88
Pronghorn Portrait 90
Ram Portrait92
Red Fox Portrait 94
Wild Spirits 96
Wolf Portrait98
Scenes
Fighting Rams 100
High Point Ridge 102
Howling Bluff
In Full Display 106
King of the Plains 108
Lookout Post
Mischief Makers
Poised for Action 114
Prairie Sunset
Ready to Strike
Red Fox Resting 120
Rising Drake
Salmon Fishing
Slippery Footing 126
Watchful Eyes 128



Mantel Patterns	
Autumn Challenge	130
Fighting Bucks	134
Fighting Elk	
Fresh Water Fishing	142
	146
	150
	154
Standing Firm	158
The Great Escape	
Woodland Gathering	166
Appendix A: Quick Glossary 1	70
Appendix B: Wildlife Reference	
Photos1	71
Indices1	74

WHAT YOU CAN LEARN FROM THIS BOOK



How to Interpret Patterns, Page 12



How to Develop Carving Focus Points, Page 15



How to Select the Best Woods for Your Project, Page 17



How to Properly Use Your Carving Tools, Page 19



Carving Techniques, Page 30

Bas-Relief (Low Relief) Carving

· Medium Relief Carving



Advanced Techniques, Page 31

- · High Relief Carving
- · Realism Relief Carving
- · Stylized Relief Carving



How to Create Shadows, Page 32



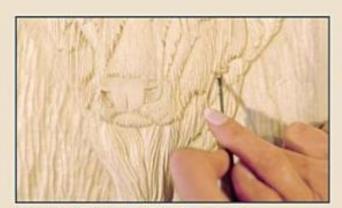
Carving Facial Features, Page 37



Fur and Hair Texture, Page 43



Feathers, Page 45



How to Carve Buffalo Portrait
—Step-by-Step Instructions, Page 50



How to Add Finishing Touches, Page 61

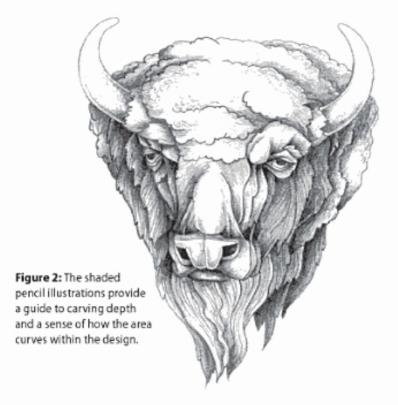


CHAPTER RELIEF CARVING BASICS

Whether you will be carving a buffalo portrait or a pair of white tail deer running through the woods, there are certain basic steps and techniques every carver uses to create a relief carving. In this chapter, we will look at some of the common woods used in carving and which wood species might be best for your project. Basic pattern work begins by determining which element is your focus point and then you will learn how to break down your design into layers to determine where each element lies in the foreground, mid-ground, and background. Those layers are transferred to your wood through one of several tracing methods. An understanding of what tool profiles are available to the wood carver and what types of cuts each makes will also be explored. Beyond your carving tools we will explore other art and craft supplies you will want to add to your carving tool kit.

The eagle in Native Spirit is done as realistically as possible. Each feather is individually carved and fine detailing is added using a woodburning tool. This attention to detailing each separate element in the design is carried into the feather accent along the side of the pattern. The carving does not need to be accurate—measuring each feather or counting the number of feathers in each grouping—to be considered a realistic carving. It is the carving of each element, instead of groupings of elements, which define realism. (Patterns on pages 88–89.)

Figure 1: The detail patterns in this book include heavy outlines around each contour area and fine detail lines for fur and feather work.



Relief Carving Patterns

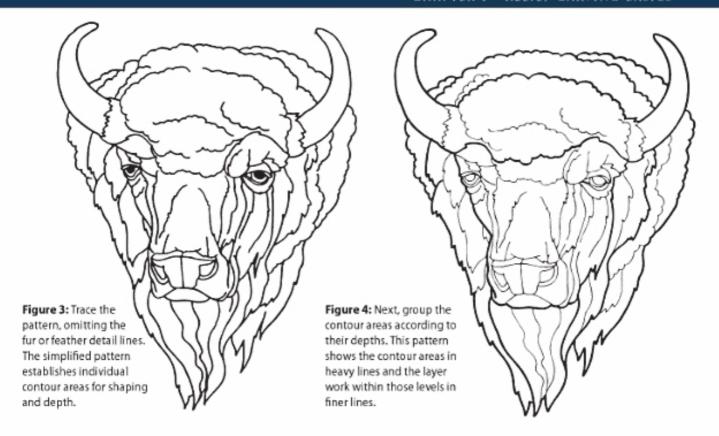
Any type of illustration or photograph is adaptable as a relief-carving pattern. In this book, you will find two versions of each pattern: one is a detailed pattern (Figure 1); the other is a shaded pencil illustration (Figure 2). Both patterns serve an important function.

Because you work relief carvings in stages, do not initially transfer all pattern lines to the wood. Most carvers start with a detailed pattern, but simplify the pattern into a contour drawing before transferring the pattern to wood.

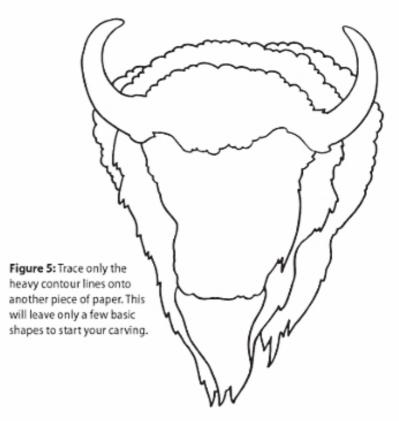
This book contains simplified patterns, but as your skills grow, you may create your own more difficult patterns. Let us look at how to make a contour drawing from a detailed illustration and how levels come into play.

Simplifying a Pattern

The patterns in this book include the contour areas of the individual animal and the fine-line fur texture. The patterns are highly detailed, so it is best to begin your project by simplifying the pattern into the basic areas of carving. Heavier outlines define contour areas and finer lines show texture detail in the Buffalo Portrait pattern. Transferring all of the lines of a new pattern onto your wood at the start of a project is time consuming and pointless because shaping eliminates most of the lines before actual carving begins.



Trace the pattern onto onionskin paper following only the heavy contour lines (Figure 3). The contour lines group areas within the design that are related either by the depth of the design, the fur groupings, or the individual facial features. Grouping elements into one area allows you to carve the depth and shape of one large area, and then add detailing later. Do not trace the fur and feather lines at this time. Your goal is to reduce the pattern to individual contour areas (Figure 4) for leveling and rounding during carving. The final tracing pattern (Figure 5) has only minimal lines.



Understanding Levels

After reducing the pattern to contour lines, group the contour areas into carving levels and divide *Buffalo Portrait* into five levels: four for the portrait itself plus one level for the wood surrounding the portrait.

In a well-balanced relief design, there will be at least four—and probably five or six—levels to the design. The first level is the background behind the main object followed by at least three levels for the scene's focus. Any item lying in front of or behind the focus adds a fifth level. A secondary area of focus adds a sixth level.

Using more than six levels in a carving can be cumbersome. As a rule, I break patterns down into five or six levels.

In Buffalo Portrait, I use five levels (Figure 6). Level 1 is the background behind the portrait. Even though there are no elements in this area, classify the background

Figure 6: Number the levels you have created from one to five. Level 1 is the background, and Level 5 is the highest area of the carving.

as a level because it establishes the final depth of the carving. Level 2 is the area of the portrait that comes into direct contact with the background. Level 2 of *Buffalo Portrait* includes the two groups of long hair directly behind the horns. The skull area just behind the horns and the medium-length hair surrounding the face become Level 3. Our buffalo's beard, horns, and forehead comprise Level 4. The face, which is the area of the carving closest to the viewer, is Level 5.

After establishing and numbering levels on the pattern, transfer the design to the wood blank. Carve each level as one unit to drop that group of elements down into the wood. The levels look like steps that eventually end at the background.

Adding Layers

After carving the levels, add layers within each level. Look at the detailed pattern of the buffalo's face (Figure 1). Level 5 includes the eyes, the muzzle, and the nose. Each element lies at different depths within the same level. Call the element depths layers.

Layers are treated the same as levels. There will be a background layer, a mid-ground layer, and a foreground layer all contained within each level. Still looking at Level 5, the nose would be in the foreground layer, the muzzle would be in the mid-ground layer, and the eyes would be in the background layer.

Levels Within a Scene

Apply the same technique of simplifying Buffalo Portrait into groups of related elements and breaking them down into levels to a wildlife scene. In the Pronghorn Scene, I have established six levels (Figure 7). Level 1 is the sky. The mountains are in Level 2. Level 3 incorporates the tree line and grass in the far distance. Carving the pronghorn in the remaining three levels gives it added focus and depth. The head and neck become Level 4. Carve the front shoulder, front legs, and belly in Level 5, leaving the back legs, rump, and tail in Level 6.

Again, each of these levels can be broken down into layers within each level. In *Pronghorn Scene*, divide Level 4 into a deep layer for the horns and muzzle, a middle layer for the eyes and ears, and a high layer for the neck.

Only five of the six levels in this pattern contain layer work. The sky/background level (Level 1) contains no layers. By dividing each of the remaining five levels into three layers, the finished carving will have fifteen different depths during the early stages of work. As you round each area and add fine details, the finished piece becomes very dimensional.

Focus Points

A focus point is some element within the carving that catches the viewer's eye. It requires extra detailing and sculpting during the working stages.

Often, the focus point of a wildlife relief carving is the face of the animal, most specifically, the eyes. Whenever possible, I locate the main focus point in one of the central levels of the design, usually Level 3 or Level 4. This forces other elements in the carving to fall both in the background and foreground of the piece, and gives the work a more realistic look.



Figure 7: Place the focus point of a scene in one of the central levels. Here, the focus point—the pronghorn's face—is in Level 4.



Figure 8: The focus point—the object the viewer notices first—is the moose. The wolves are a secondary focus point because of their importance to the story the carving tells.

Buffalo Portrait's focus point is the eyes.

They will be the first area that draws attention in the finished piece. The secondary focus point is the horns. Every element within the buffalo is composed of varying lengths of hair that seem to go in all directions. The horns, however, are very smooth and rise out of this mass of texture. They are a wonderful contrast to the confusion of fur on the buffalo's face.

The pronghorn design focuses on the face. However, the rump and tail need extra accent because the pronghorn is moving away from you. This rump area becomes the secondary focus point. The animal's face does not always have to be the focus point of a relief carving. In Standing Firm (Figure 8), the focus point is the area of the carving the viewer notices first—the moose standing defiantly against the hunters. The wolves are the second-most-important element in the carving and therefore become the secondary focus point. The moose and the wolves make up the main characters in the story of this pattern. Other elements within the design—the trees, the creek, and the sky—create the backdrop for the story.

Relief Carving Woods

This list is by no means a complete list of woods used for carving; it is a listing of woods I have used and have found to suit my needs. With patience and determination, any wood is suitable for carving. Make use of the many well-written resources available on wood to research species not mentioned in this list.

Basswood. Also called American lime, basswood (Tilia americana) is a soft, creamy-white wood that is easy to work and glues well into larger blocks. It has no figuring and a fine, straight, even grain. The sapwood is almost white. Basswood carves well and is excellent for detail work. It is very lightweight. Commonly used in carving, turning, and toy making, basswood is a fantastic wood for a beginning relief carver.

Butternut. Butternut (Juglans cinerea), also called white walnut, offers a medium-fine straight grain with a golden-brown tone that changes to reddish-brown at the sapwood. If you use an oil finish on the carving, the surface of the wood takes on a light oak tone. Butternut, which is lighter in weight than black walnut, is very adaptable to high relief carving with some fine detailing. Butternut is a favorite for furniture carving and veneering.

Honduras-mahogany. Honduras-mahogany (Swietenia macrophylla) has a reddish tone that deepens beautifully over time. It is a strong, lightweight wood with straight, even grain. Honduras-mahogany is an excellent wood for carving and takes extremely fine detail well. Uses include furniture making, veneers, carving, and turning. Honduras-mahogany is a favorite for many carvers.

Jelutong. A soft wood much like butternut, jelutong (Dyera costulata) has a silvery-gray sheen when finished. Fine-textured and straight-grained, it often contains sap channels throughout the wood that can add to the mystique of the carving. Use jelutong for carving and pattern making. This unusual carving wood is one of my favorites.

Walnut. Walnut (Juglans nigra), also called black walnut and American walnut, is an extremely durable wood that accepts relief carving well. Most walnut carving requires a chisel and mallet because of the wood's hardness. The grain is medium-coarse, yet straight. Walnut burls can have very interesting figuring. The color of walnut can change quickly from deep reddish-brown to a creamy white. Furniture makers, furniture carvers, woodturners, and general carvers use walnut.

Obeche. Obeche (Triplochiton scleroxylon), also called wawa, is an extremely soft wood with a very featureless grain. It marks easily with any pressure and requires careful treatment in pattern tracing and handling. Obeche requires finely honed knives for the best cutting strokes. Because it is exceptionally lightweight, obeche works well for three-dimensional wildlife carving and model making.

Sassafras. Sassafras (Sassafras albidum) is a hardwood similar to walnut in its ability to accept relief carving. It has a very interesting, distinct grain pattern that is straight. This medium-to-heavy weight wood has a creamy tan coloring with darker brown grain lines. Sassafras smells wonderful while you are carving and is used in furniture making, furniture carving, and carving in general.

Transferring the Pattern

Once you have selected your wood and reduced your pattern to its simplest lines by establishing levels, transfer the pattern to the sanded wood surface.

Carbon Paper Transfer. The most common way to transfer a pattern is to use carbon paper. Carbon paper placed between two sheets of paper creates a second copy of the top page.

To transfer the design using carbon paper, position the design on the wood surface and secure it with masking tape or clear tape. Slide the carbon paper behind the pattern with the black/blue surface facing the wood. Use an ink pen to trace over the pattern lines, A red ink pen helps me keep track of which lines in the pattern I have traced and those I have not.

When you have copied every line, lift one or two pieces of tape, leaving at least one piece of tape still in place to secure the pattern. Check that you have indeed traced the entire pattern. If you missed any areas, re-tape the pattern and trace the missed lines.

Carbon paper makes a clear dark line that easily carves away as you work. It does not leave any stain marks, nor will it rub off the wood surface as you work the carving. However, carbon does not erase with a pencil eraser. Use a knife to eliminate any lines remaining after the carving is finished.

Soft Pencil Tracing. A second way to transfer your design is to use a soft lead pencil to blacken the back of your pattern paper. You are creating your own carbon paper.

Turn the pattern paper over to the back.

Use a soft lead pencil and cover the entire
back with a layer of pencil lead. Blacken the
paper and do not leave any white areas. Flip
the pattern over so you can see the design and

position it on the wood. Tape the pattern to the wood and use an ink pen to trace over all of the design lines.

Soft pencil tracing creates a lighter line than carbon paper and can rub off as you work on the project. However, you can easily correct or adjust the design after transfer to the wood by erasing the lines and redrawing them.

Soft pencil tracing is an excellent transfer technique for woodburning, because lines remaining after project completion easily erase. Often I go over the traced lines on the wood project with a pencil to darken the pattern before I begin work.

Using the soft pencil method to transfer a pattern to the wood is especially helpful for patterns placed in tight areas. For example, you may wish to accent the edge of a box lid where the space is only 1" wide x 6" long.

Using two full sheets of 8½" x 11" paper—one for the pattern and the second for the carbon paper—can be very cumbersome. Instead, cut out just that strip of pattern from the full paper. Blacken the back of the strip, tape it into place, and quickly trace it using just the one cut-to-size piece of the design.

Newspaper Tracing. If the project and pattern you have chosen is very large, you can use newspaper as your tracing medium. The ink used in newspaper production will create tracing lines on the wood. Use a page with densely packed type, such as the classified ad section. Place the newspaper underneath the pattern and copy the lines using an ink pen. The pen point transfers ink from the newsprint onto the wood.

Newspaper tracing leaves a broken line or dashed line effect because the ink only appears where there was printing on the newspaper. Once the tracing is complete, use a pencil to connect the dashed lines on the wood surface.

Carving Tools

Bench Knives

The bench knife—also known as a detail, whittling, or straight knife—has a thin blade, about 1¾ to 3* long, that tapers to a point at the tip. The entire straight face of the edge of the blade is sharp. Short-bladed tools are called bench knives, where longer-bladed styles are called Sloyd knives.

Chisels

The final edge of a chisel is sharpened and cut in either a square or angled end. In relief carving, use flat-ended blades for stop cuts, removing large areas of unwanted wood, rounding over edges, and crisping corners. They also are excellent for scraping the final surface to leave a clean, smooth finish.

Chisels come in a variety of shaft lengths, edge angles, and shaft bends. When the edge is cut at an angle to the shaft, it is called a skew chisel. Both the undercut and dogleg chisels are custom bent tools for working beneath an undercut ledge. The mortising chisel creates perfect 90° angles in your work.

Round Gouges

Another style of tool you will be using in relief carving is the gouge. Gouges end with a squared-off edge.

Gouges encompass a range of edge shapes, from wide-diameter C-curve gouges to tight, rounded U-curve gouges. The gouge's curvature is called the sweep. You may find gouges also listed under veining tools, fish tails, spoons, and spoon bit tools.

Gouges remove great quantities of wood at a time. In relief carving, they make rough cuts and textures.



Knives with different blades are an essential part of a relief carver's tool kit. Starting at the left side of the board are two chip carving knives, a detail knife, and a bench knife. The large-bladed knife is a Sloyd knife; a whittling knife is in the foreground.



Chisels add versatility to the relief carver's tool kit. From top to bottom are a ½" mortising chisel, a ¼" straight chisel, an undercut chisel, a palm skew chisel, a palm straight chisel, a ½" straight chisel, and a micro chisel.



Gouges, used for rough cuts and texture, come in many sweeps. From top to bottom: a narrow-sweep straight palm gouge, a wide-sweep straight palm gouge, a straight gouge, two micro gouges, and a front bent gouge.



V-gouges come to a sharp V at the tip. From top to bottom: a corner chisel, a V-gouge or V-point chisel, a micro V-gouge, a bent V-gouge, and another micro V-gouge.



Specialty tools in a kit can include a veining gouge, a spoon bit round gouge, a dog leg chisel, a compass, and a depth gauge.

V-Gouges

The V-gouge (also called V-point chisels, V-tools, and parting tools) comes to a sharp V-point at the tip. It creates a deeply scored line in the wood. They are available in a variety of angles, from a tight V called a veining tool, to a wide V, sometimes called a corner chisel. Use the V-gouge to carve along joint lines in your design and to detail pattern areas.

Specialty Tools

Every carver will come across specialty tools that look inviting. For wildlife relief carving, the following five tools may come in handy for those hard-to-reach areas.

- A U-shaped veining tool makes a deep trough-like cut in the wood. It is an excellent tool for bark texturing and undercutting.
- A spoon bit gouge is ideal for working on background areas that taper into an undercut.
- The smallest tool is a dogleg chisel, which is an invaluable tool for teasing out the wood behind an element that needs to be freed from its surroundings.
- A compass and depth gauge. Use a compass to quickly create even guides for borders and margins that surround the carving. (See step 5, page 52.) Use a depth gauge to check the carved areas against the edge of the wood blank. This tool makes it very easy to establish levels and layers within the work.

Measuring Tools

You may wish to add a few measuring tools to your carving kit. Many tools not specifically made for carving can be useful to relief carvers.

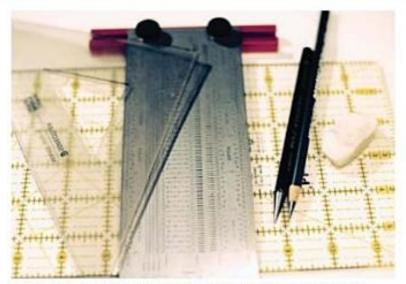
The grid ruler in the photo (above) is a quilting ruler. A transparent ruler allows you to check your pattern placement against the wood edge. The vertical and horizontal lines on the ruler make adjusting for square angles quite simple.

Also in the photo is a small T-square ruler. Placed against the edge of the wood blank, it can easily slide along an edge to check multiple areas in the pattern. The architect's triangle, which is used similarly to the T-square, is always part of my working kit.

Finally, I keep a soft-point pencil and a white vinyl eraser in my carving kit. A 4B, 5B, or 6B artist's pencil creates dark, easy-to-follow lines without having to push the pencil point heavily into the surface. The white eraser will remove pencil lines without staining the wood.

Cleaning Tools

Again, many tools not specifically made for woodcarving can make cleaning up easier. A leatherworking awl is excellent for teasing out splinters in hard-to-reach corners. A brass wire brush and an old toothbrush will remove the excess fibers around a cut. The miniature rifflers and straight files—each with a different edge, curve profile, and coarseness—will round off sharp edges left by the chisel in the deep joints of the work. Finally, I have a small assortment of dental picks. Like the awl, picks work into areas straight tools cannot reach.



Square the pattern to the wood blank using an assortment of measuring tools. From left to right are 90° triangle, a sliding T-square, soft lead pencils, and a transparent quilter's ruler.



Cleaning tools often include rasps, small files, dental picks, and wire brushes.



A homemade honing board is a simple device for sharpening your round gouges and V-point chisels.

Sharpening Stones

Find a set of sharpening tools small and compact enough to stay right in your kit, making them quick and easy to grab during any stage of work. A coarse sharpening stone creates the angle of the edge of the blade; it removes a great deal of steel from the blade. When the edge angle is established, use a fine grit stone (a white stone is a good choice) to develop the sharpness of the edge. The strop and rouge (honing compound) remove any flexible metal edges, referred to as "tin edges;" and give a fine finished polish to the tool.

Honing Board

A honing board will save you many hours of frustration in sharpening your gouges and V-chisels. On a piece of scrap wood, carve a profile of both the face and the back of each of your gouges. Cut the profile deeply into the basswood. Use a bench knife to flare open the sides of the profile to give your gouge some room for movement within the cut. With an old kitchen knife, scrape along a rouge stick to fill the profile cut with red-oxide dust. Pack the dust into the profile cut using the gouge. A drop of very fine grade oil helps hold this initial packing of the honing rouge in place.

Basic Carving Cuts

Any scene or themed pattern uses several basic carving cuts. This section explores the stop cut, hogging out, rounding over, V-gouged lines, and the undercut. Technique photos follow this brief introduction to each cut.

Stop Cut

The first step in any carving is cutting along the pattern lines to separate each area from the remaining wood. The cut is a stop cut. As you work the area inside the stop cut, any wood slivers removed will stop crisply at the stop-cut line.

Use a bench knife to make a stop cut.

In narrow or tight areas, however, a small straight chisel pushed vertically into the wood also will make a stop cut. The chisel creates a thin break in the wood grain, cutting one area free from another section of the design.

After making the stop cut, use a gouge or chisel to carve away the background. Push the tool into the wood up to the stop cut using a controlled motion. The wood flakes away instead of splintering.

Recut the stop cut as often as needed to slowly develop the depth of the carving. Worked carefully, the technique creates crisp division lines between the different areas of your carving.



Stop Cut 1: Use the bench knife in an upright position and cut approximately 1/8" deep. Pulling the knife in the direction of the wood grain prevents the knife's edge from catching the grain and splintering out a larger area than desired.



Stop Cut 2: Because the bench knife is double-edged (sharpened on both sides), it creates a clean cut at any angle. Change the angle of the handle in your palm to make the cut on the other side of the pattern.



Stop Cut 3: Drop the angle of the knife blade toward the board slightly and cut into the pattern line again. The cut removes a small V-shaped sliver of wood from the joint. Once the joint is opened, you will be able to see how deeply you have carved. Recut as necessary for depth.



Stop Cut 4: Many areas in a design have tight corner turns. After cutting the pattern lines meeting at the joint, lay the bench knife close to the wood surface and slide it into the corner. The cut lifts out a triangular shape of wood, leaving a clean joint.

Hogging Out 1: Use a gouge to hog out the background of this level, Notice how the gouge chips end at the stop cut made by a bench knife.





Hogging Out 2: Lay a wide-sweep gouge at an angle against the wood and slide it into the stop cut to finish the joint.

Hogging Out

Use either a gouge or a chisel for hogging (or roughing) out an area. Within a section, remove large areas of wood to create levels in the work before any final shaping or detailing takes place. Front bent gouges, spoon bits, and fishtails are all great tools for quick background or level cuts.

In the pronghorn design, I used the bench knife in an upright position, and cut approximately %* deep. I pulled the knife in the direction of the wood grain to prevent the edge from catching the grain and splintering out a larger area than desired.



Smoothing 1: Turn the straight chisel so the back of the tool faces you. At that angle, the tool acts like a miniature plane. Lead one edge of the chisel into the cut to work the background down. Use fine grain sandpaper for any additional smoothing.

Smoothing/Rounding Over

After hogging out an area, remove any roughness using a straight chisel. A straight chisel will shave a sharp-edged cut within your work much like a woodworking plane, removing thin flat layers of excess wood. Use the round gouge for rounding over.

V-gouge Lines

Use a V-gouge or parting tool to cut angled lines into an area. The technique works well for defining muscles, and adding fur and feather details.



Rounding Over 1: Use a chisel to round over an area or element. Working with small slices, the chisel gives you excellent control over the amount and depth of the cuts.



V-gouged Lines: Here I am preparing to use a V-gouge to establish the different muscles in the pronghorn's leg using the V-gouge.



Undercut 1: Make the undercut with a bench knife and gouges. Before making an undercut, establish the levels between the two sections of the carving. Be sure to do any hogging out and smoothing needed for each section. Reaching under the edge at a sharp slant, make the undercut using a bench knife along the side of the high area.

Undercut

An undercut does two different jobs for the carver. First, it creates an illusion of depth greater than the carving truly has. Second, it hides a joint between elements. This is especially useful when the joint falls between two differently textured areas.

An undercut does not need to be deep or dramatic. The goal is to remove only enough wood to create a shadowed effect in the carving.



Undercut 2: Lay the bench knife at an angle to force the blade closer to the wood in the background area and recut the joint. By dropping the angle of the blade, you create a wedge-shaped cut under the main element of the pattern.



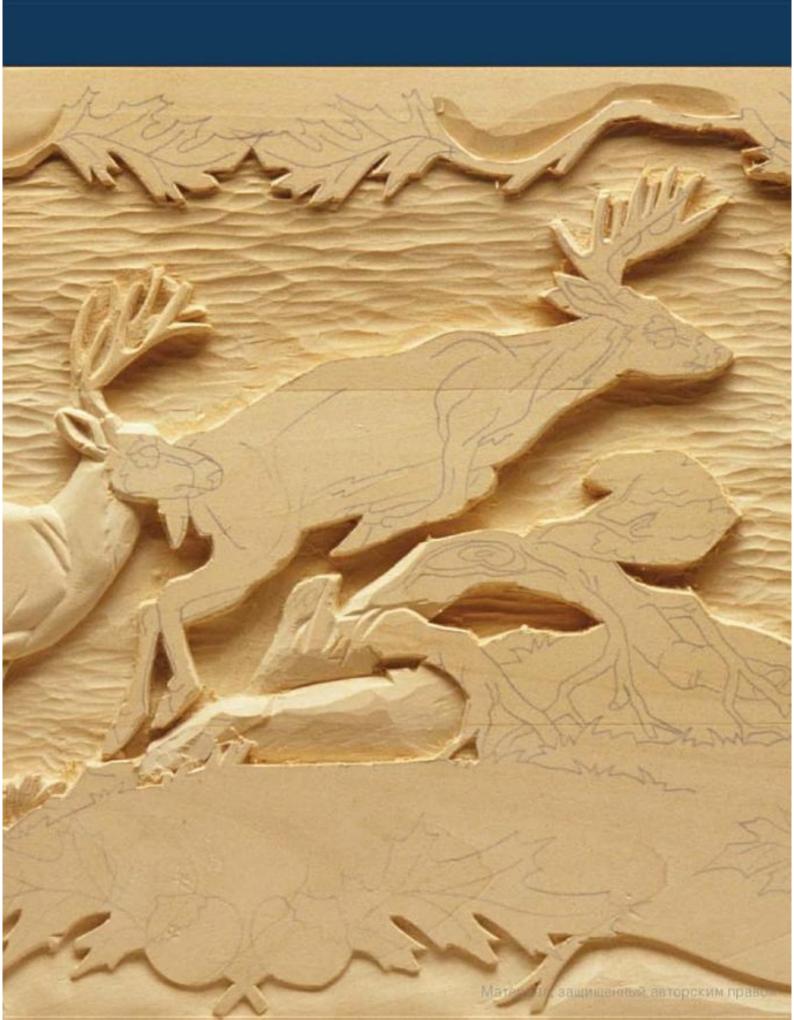
Undercut 3: Use a bench knife, back bent gouge, or dogleg chisel to reach into the cut and clean out the wedge-shaped area.



Undercut 4: The dogleg chisel is perfect for smoothing the background area beneath an undercut.



Undercut 5: Remove any fibers left over from the undercutting process with a small strip of fine-grit sandpaper, 220 grit or finer.



CHAPTER ADVANCED TECHNIQUES

Relief carving is also a wonderful genre for portraying realistic wild subjects.

A number of different carving styles, as well as some techniques to create more depth, will help you make realistic scenes.

Now that you've mastered the basics of relief carving, let's discuss some advanced techniques. In this chapter, I will review the various types of relief carving, how to add shadows and depth, how to free an element from the background, and how to master multiple depth techniques.

The Great Escape is destined to become the lid to a carver's tool chest. The project combines some of the different techniques this book explores, including tracing the pattern, level and layer work, rounding over, undercut, and detailing. (Patterns on pages 162–165.)



The Great Escape (patterns on pages 162–165) is an example of low relief carving. The elements are rounded over and raised only slightly above the background.

Relief Carving Styles

There are five basic styles of relief carving.

Any of the styles work well for wildlife relief carvings. Choose a style based on your personal preference, your pattern, and your carving skills. In general, low relief carving is easier than high relief carving, but that does not mean low relief carvings are not equally beautiful. In fact, they can be quite spectacular.

A medium relief carving displays multiple levels. The face of the buffalo in Buffalo Portrait (complete piece on page 46, patterns on pages 48–49 is on a different level than his horns and his back.



Low Relief Carving

Low relief, also called bas-relief, is a style of carving where the figures or elements in the scene are raised only slightly above the background level of the work. The Great Escape (patterns pages 162-165) is an example of this type of work. Worked on a 1/2"-thick basswood plaque, the carving has no areas more than 1/4" deep. Each area or element within the design has been left smooth with no texturing. The smoothness of the deer emphasizes the body shape and muscle tones of the running animal. Most of the areas have non-dramatic joints, so the wood flows from one section into the next, casting soft lightcolored shadows. With low relief, the carving appears to have only two levels; one level for the background and a second level for the carved design.

Low relief is one of the earliest forms of carving. Low relief is well suited to wildlife scenes and an excellent style for the new carver.

Medium Relief Carving

Buffalo Portrait (finished piece page 46, patterns pages 48–49) is an example of medium relief carving. The carving is worked at a greater depth than low relief and begins to use multiple levels of work rising from the background surface. The joints between levels are smooth and flowing. There are few harsh shadows in the carving, and the levels are obvious.

The buffalo is worked on a ¾" basswood board, and the deepest carved points go ½" deep into the wood. This added depth allows a very shallow three-dimensional effect to develop in the portrait and provides room for detailing the hair and fur.

High Relief Carving

The high relief style of carving uses very pronounced three-dimensional effects. This style of relief tricks the viewer's eye into believing the elements in the scene take up more space than they actually occupy. Levels are broken into layers, increasing the number of height points throughout the carving.

High relief carving depends heavily on the use of undercuts—rapid drops in the carved levels and dark, dramatic shadows to exaggerate the scene. Carving Red Fox Resting (finished piece page 35, patterns pages 120–121) employs all three techniques. Detailing is widely used throughout the work, and the texture is changed often to visually separate elements.

The red fox and the buffalo were worked on %" basswood plaques with the carving at a ½" depth. Both carvings are the same depth, but you can see the difference the shadows make. Red Fox Resting is a deeper relief, so it has more shadows and looks three-dimensional. Buffalo Portrait is a lower relief and has fewer shadows and a flat look.

Realistic Relief Carving

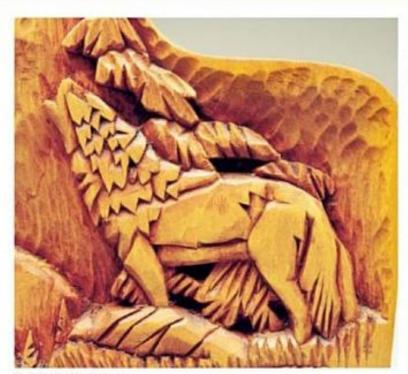
In a realistic carving, each area of the design is treated with care to achieve a look as true to nature as possible. Native Spirit (finished piece page 10, patterns pages 88–89) requires carving the eagle's shape and sculpting each feather individually. Woodburned texturing increases the effect on each feather. Native Spirit is done on a ¾" board and the deepest cuts are only ¾" into the wood. Although Native Spirit is shallower than Buffalo Portrait, the attention to detail defines the carving as a realistic carving.



The visual effects of high relief carving depend on deep shadows cast by several different techniques. Red Fox Resting (complete piece on page 35, patterns on pages 120–121) uses several techniques to give the illusion of great depth.



Fine relief-carved detail, woodburning, and paint create realistic renderings of animals and birds such as Native Spirit. (See complete piece on page 10, patterns on pages 88–89.)



Howling Bluff (complete piece on page 72, patterns on pages 104–105) is an example of stylized relief.

Stylized Relief Carving

If you do not want to emphasize the scene's depth or detail work in your carvings, stylized carving is another option. With stylized carving, individual tool cuts are used to create the scene. Stylized relief carving focuses viewers on the cuts used to create the relief.

In Howling Bluff (finished piece page 72, patterns pages 104–105), every gouge stroke and bench knife cut shows. Little or no sanding has been done to this work because sanding might erase the chisel marks that taper one area into another.

Creating Shadows

Shadows can add an illusion of greater depth and more three-dimensionality to your work. Because most relief carvings are done on wood that is between 4/4 and 8/4, there is very little actual space in which to work. The darker the shadow cast by an element in the work, the greater the depth it implies.

Here are four simple ways to create those desirable dark shadows in your finished project and exaggerate the look of depth in your carving.

Levels and Layers

We have already explored the idea of using levels and layers in the early stages of carving (see pages 14–15). Levels and layers step the viewers back into the scene and visually suggest deeper work than exists.

Undercut Stroke

The undercut adds crisp, dark shadows to the work. Pages 26 and 27 discuss the technique, potentially one of the most valuable cuts in your arsenal. Portraits or full body patterns easily adapt to undercutting. Try undercutting around the entire body of an animal, separating it from the scenery and visually pushing it away from its surroundings. The soft shadows cast by the solid joints between the levels strengthen the darker and more defined shadows. The shadows halo the animal.

Using a Shadow Box Effect

Someone in your family has no doubt made a shadow box scene as a school project, laying a shoebox on its side, creating a room with three walls, a ceiling, and a floor. Then, pictures were glued to the floor of the box. The pictures cast shadows on to the back wall of your box, implying depth and dimension.

This same idea used in relief carving creates a shadow box effect for your work. Watchful Eyes (finished piece page 2, patterns pages 128–129), the carving of a pair of wolves, is done on 8/4 board, providing a nice amount of working space. When the scene was traced, I allowed a ¼" border along all sides of the wood blank. This framing edge remains at the original level of the work.

Planning one area in a shadow box carving to contain both the foremost level and the background level without any other elements enhances this effect. The background of Watchful Eyes is uniform, very deep, and contains no carved elements. Along the wolves' left side, these two areas come together, giving your eye a chance to compare the highest and the lowest points on the work.

Freeing an Element from the Background

Creating a few free floating areas in the carving adds surprise and emphasizes the carving depth. Note on the right side of Red Fox Resting there is a clump of grass just beneath the tree branch. In this clump, several of the blades have been carved free from the background and cast very clean, distinct shadows. The shadows for the blades move and float across the work as the viewer moves. The shadows of the leaves just over the rocks and the leaves on the tree branch provide even more movement.



The shadow box effect, used in Watchful Eyes (complete piece on page 2, patterns on pages 128–129), creates great shadows and the illusion of great depth.



Deeply undercutting the area frees the elements of a carving—in this example, the blade of grass. The thinner the blade of grass and the longer the free cut slit behind it, the larger and more dramatic shadow it casts.



Lay the knife's blade close against the background wood and make a second bench knife cut. Repeat these steps for the undercut and bench knife cut on the opposite side of the branch. Work the undercuts until you have an open slit under the area to be freed.

Because the elements are free, there is nothing in the carving to stop the shadow from moving with the change of lighting or the position of the viewer. When the viewer moves his position to the carving, the shadows move. The movement catches the viewer's attention as he or she searches for the source of the shadow. It is fun to watch someone search for the source of the shadow and their delight when they find the open area buried inside the project.



A chisel or round gouge removes the wood from the area under the branch.



A dogleg chisel gives the background surface a smooth finish.



Tear a strip of sandpaper about 36" wide and 6" long. Feed this into the open slit you have created with the grit side facing the tree branch. Use the sandpaper to remove the excess wood from the back of your element.



Use the strip of sandpaper to clean up the corners where the element rejoins the background. All of the work here was done in less than %" of wood on a 34" basswood plaque.



Multiple depth techniques are used in Red Fox Resting to give the piece a greater illusion of depth.

Multiple Depth Techniques

Multiple techniques can be used in the same design to make your carvings dramatic. Red Fox Resting uses all of the tricks available to imply greater depth than really exists.

The Red Fox Resting pattern first was reduced to levels and layers, as can be seen in the area of the fox's body. The background is Level 1, the back is Level 2, the face becomes Level 3, the tree root is Level 4, and the tail is the final, and highest, level, Level 5.

The tree on the fox's right, the leaves, and the fox's whiskers/beard are all undercut. The fox's face is in front of the tree branch and the undercutting pushes his whiskers away from the bark.

Use shadow boxing around the grass and leaves. In the clump of grass in front of the tree stump, the blade of grass is at the original level of the wood but the joints of the tree stump drop deeply into the farthest point of the carving. The technique is repeated in the blades of grass on the fox's left side and in the hole in the old stump. The shadow boxing makes several extremely dark areas that contrast the lighter shadows in the face.

Finally, several elements in the design were carved free from the wood to create floating shadows. Freeing an element from the background requires you to lower the area behind the element slightly and increase the distance between the element and the background. Tree branches, grass stalks, ears, and tails are all elements in a wildlife scene that can be freed easily.

The finished piece appears to be as deeply carved as Watchful Eyes, yet the carving is done on a ¾" board with none of the carving cuts being greater than ½" deep. In Watchful Eyes, the carving uses a full 1½" of wood to create the relief.



SPECIAL TECHNIQUES FOR WILDLIFE FACIAL FEATURES

If you are going to carve wildlife in your relief projects, you need to have a good understanding of the anatomical features of your subject, especially the facial features. Study reference photos of your subject, observe the animal in its natural surroundings, read about its habits, and practice the techniques I will share in this chapter. Your carving will lack artistry if the facial features that provide drama and realism aren't accurate.

Done in low relief, Salmon Fishing is carved on a ¾" butternut key chest door. The carving is completed in a ¾" or less depth and accented with spot staining to highlight the carved work. Note how the gold-and-silver tone of the background wood emphasizes the stained areas of the pattern. (Patterns on pages 124–125.)

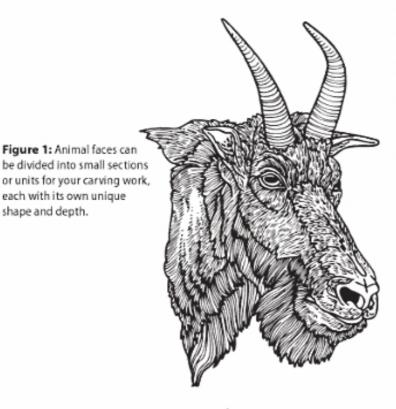


Figure 2: By tracing just the contour outlines, you will be able to distinguish the individual areas of the face.

shape and depth.



Facial Features

There are certain carving techniques that will make the features common to all animals easier to carve. In this section, we will take a closer look at eye circles, muzzles, horns, and ears. As an example, I have simplified Mountain Goat Portrait (Figure 1) into its basic contour areas (Figure 2). Each section of an animal's face has distinct physical properties that can be used to guide you in your wildlife relief carving.

Eye Circle

Two spheres, with one inside of the other, comprise the eye. The eyeball is the small sphere set inside the large sphere. The large sphere is made up of the upper and lower eyelids. The larger sphere is not an even circle. The upper eyelid extends farther from the eyeball than the lower lid. The larger upper lid protects the eye by creating an overhang or shelf.

The deepest point in the face is part of the eye circle (Figure 3). At the inside corner of the eye where the upper and lower eyelids touch, the muzzle drops dramatically into a deep pocket on the nose slope. Touch the corner of your own eye with one finger. Feel how deeply the corner of your own eye is set into your face. It lies lower than the eye circle, the nose bridge, and the cheekbone.

From the pupil, the center point of the eye, the eye curves away both horizontally and vertically.

Muzzle Slope

The muzzle slope (Figure 4) is a long tube that connects the forehead and the nose. The eye circle sits beside the muzzle. At the top of the muzzle is a dent called the stop. The stop is where the tube curves up to attach to the forehead. Run your finger up the center of your own nose. Your finger stops at the sharp dip where your nose meets your eyebrow ridge. On animals, the stop often displays fur or fur swirls.

There is a second bend in the muzzle above the nose joint. The second bend appears in the drawing as the darker shadow at the muzzle tip. Run your finger down the center of your nose and feel the small dip just before the ball,

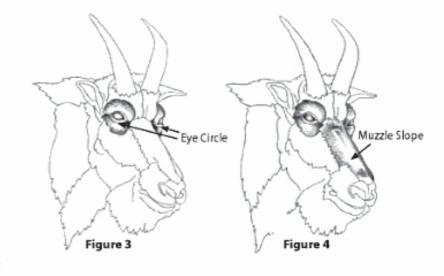
A small trough runs down the center of the muzzle. This is not a distinct joint area. It is a slight impression where the two sections of bone meet beneath the skin.

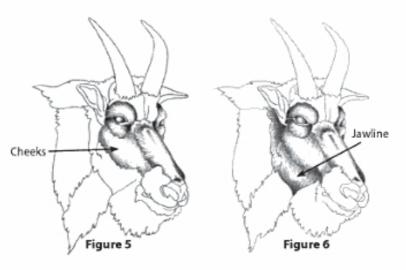
Cheeks

The cheek area (Figure 5) is a curved tube that lies to the side of the muzzle. The highest point of an animal's cheek is under the eye's outside corner. Everything tapers away from that spot.

An animal's facial curve is more dramatic than that of a human. The tight curve on the animal's face moves the high point of the cheek away from the pupil of the eye and toward the ear area. Place your fingers flat against your cheek, letting the tip of one finger find the corner of your eye. You will be able to feel the location of the high point of the cheek for an animal just under the first joint of that finger. The slope of the cheek parallels the muzzle, joining the muzzle at the circle created by the lips.

Just as with the muzzle, the eye circle lies above the cheek, not in the cheek area. For animals, the joint between the eye circle and the cheek is more dramatic than in humans.

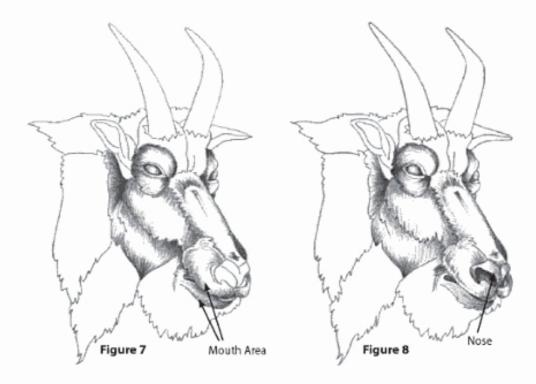




Jawline

The jawline (Figure 6), which lies below the cheek, is a flat plane that quickly curves under the face at the jawbone. The amount of facial hair an animal has determines how crisp a corner the bottom jaw makes. In our mountain goat, the animal's jaw is where the longer facial hair begins. The jawline is less sharp than other animals' jawlines.

The mountain goat's jawline begins behind the ear and flows down to the chin area of the face. Place your hand on your jawline. Starting at your chin, trace the path as it flows upward along the face. Note, the top of your jawbone is behind the lobe of your ear.



Mouth Area

The mouth area (Figure 7) is a half-circle that includes the upper lip, mouth, and lower lip. The opening of the mouth divides the halfcircle shape into two horizontal lip areas.

The upper lip area is much larger than the lower. It extends from the sides of the muzzle and rolls out and then down to the mouth. The point of the nose divides the upper lip area into two sections, and makes the animal look as though he has two upper lips, a left one, and a right one. The upper lip, as with the upper eyelid, overhangs the bottom section of the mouth and the lower lip. Very little, if any, of the top opening of the mouth is visible.

The lower lip area contains both the bottom section of the mouth and the beginning of the chin. For most animals, the lower lip is about one-fourth to one-third the width of the upper lip. The lower lip drops straight from the mouth joint and curves under into the chin area. A small amount of lip skin shows in the lower area just under the dividing line of the upper mouth section.

The actual mouth line differs from animal to animal depending on the skull's shape and the structure of the teeth. Our mountain goat has a soft upward curve to its mouth line. Some animals, such as the mountain lion and the bobcat, have large canine teeth extending below the upper lip. The bottom mouth line on such an animal dips to accommodate those teeth. The front of the lower mouth on these cats has a W shape to make room for their teeth. Watch your patterns for clues about how that animal's mouth is shaped. Check additional reference sources if you need more information.

At the corner of the mouth where the upper and lower lips join, there is a small semi-circle puff of skin. This is located where the mouth and cheek come together. Put a nice smile on your face; then, touch the corner of your mouth and feel how the cheek area suddenly puffs up.

Nose

The nose (Figure 8) of an animal is at the base of the muzzle but there is no distinct joint at their meeting point. The fur on the muzzle just above the nose begins to thin and slowly disappear into the nose skin. The top surface of the nose parallels the muzzle and is flat.

At the sides of the nose, the nostril openings separate from the muzzle from the nose. The side of the nose rolls away from the muzzle, down toward the mouth area, then quickly back in toward the center of the nose. Animal noses have no fur but are instead rough textured skin. On the front side of the nose there is a center dividing line that will need to be noted.

The nostrils are long deep holes or slits in the skull. When carving, remove as much wood as possible from the inside of the nostril to create a nice, deep cavity.

Forehead and Horn Sockets

The mountain goat's forehead (Figure 9) rises quickly away from the top of the muzzle, creating a sharp joint at the stop point. The area's shape and slope changes with the species you are carving and must be adapted if your animal has horns.

Some species, such as the buffalo, display large, dramatic foreheads. Other animals, like the whitetail deer, have almost no forehead: the face area takes a quick turn at the forehead and goes directly into the skull region.

The bases for horns or the antlers are at the top of the forehead region. The bases usually are toward the sides of the head. The skin from the forehead flares slightly around the bottom of the antler and extends above the forehead just enough to cover the base of this bony structure. In essence, the forehead area where the horns meet the skull becomes a small

fur-covered tube that is wider in diameter than the actual horn.

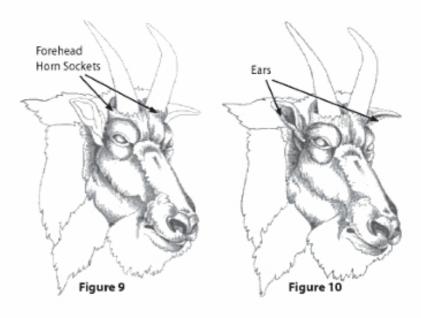
Antlers and horns sit in front of the ears, not behind them. If humans had horns, they would be placed around the temple in your forehead.

Through the center of the forehead, from top to bottom, runs a small indented line. If you rub your finger down your own forehead just above the eyebrows, you will be able to feel the dip. The line can be very prominent in some animals. Check your pattern carefully.

Ears

The ear (Figure 10) structure of an animal is a slice-of-pie-shaped flap of skin folded at the wide side of the pie shape where it joins the face. The point of the pie shape is the tip of the ear; the fold area becomes the opening into the ear canal. There are many wrinkles and bends in this portion of the ear because the section of skin that creates the flat wraps back on itself.

The outside fur on an animal's ear is usually fine, but the inside opening of the ear will have tufts of long hair. This inside hair flows away from the face and is used to keep the ear clean.



Ears can be one area of an animal's portrait that the carver can use to give a sense of expression to his portraits. Ears laid back against the head, flat to the skull, suggest the animal is angry or defensive. Ears perked forward will show that the animal is intensely interested in something. The ears on the mountain goat seem to imply a relaxed state.

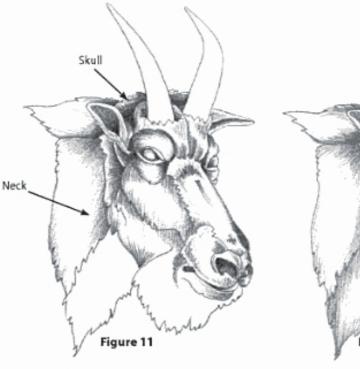
Pay attention to the position of the animal's ear. If you carve a mountain lion's snarl with a fully open mouth showing many teeth but have his ear perked forward, you are giving a confusing statement to the viewer. The snarl says he is angry, while the ears say he is curious. Humans show emotion with their eyes and mouths while an animal shows emotion in its ears.

Skull and Neck

The skullcap (Figure 11) picks up the curve of the forehead, and then bends back into the neck region. An area at the center point of the skull lies slightly higher than the top of the neck. The area is rounded over and drops down to meet the center or spine ridge in the top of the neck.

If you rub your hand up the back of your neck, you can feel where the base of the skull begins to flare out. Because the head and neck of an animal are usually in a horizontal line, the flared area will show in your work.

Again, rub your neck, but this time move down toward your spine. You will be able to feel how the spinal bones become prominent where your neck meets your shoulders. This is also true for wildlife. Take note in the drawing





of the small hump in the upper section of the neck, right behind the skull.

The neck can often look as though it is in two sections, one upper section behind the skull, and a lower section behind the ear and jaw line of the face. This double-section look is created by the muscle structure under the fur.

Only two animals in this book have a true back hump: the buffalo and the moose. A true hump is a section at the base of the neck just above the shoulders where extra fat is stored. In both animals, the hump is more obvious if you are carving an autumn or winter scene and minimal in a springtime setting. The closer the season is to winter, the more fat the animal will have stored in that hump.

Adornments

Most forms of wildlife display a variety of adornments (Figure 12): horns and antlers, beards and mustaches, even flowing manes or ear tufts. The adornments are the areas in the carving that can be the most fun to create.

Our mountain goat has a nice set of ringed horns, a flowing beard, and a longhaired bib on the neck. His horns rise vertically from the forehead, and then bend back toward the skull area. The rings on the horns are well defined.

The beard flows from the base line of the bottom lip section of the mouth. Because the beard is several inches long, there is no body structure underneath it to define where it should lie. Beards such as this will have hairs that move back and forth over each other and split sections where the hair has separated.

The hair in the bib section for our mountain goat is shorter than his beard and has a large section of skin beneath it. This area will have a more controlled look in the way the hair flows.



Fur and Hair Texture

The hair, fur, and feathers (Figure 13) change in length, coarseness, and shape depending on where they are on an animal's body. A general rule of thumb for facial hair is the farther it is from the center of the muzzle, the longer the hair is likely to be. The eyes and muzzle areas of the face often have the finest and shortest hair. Medium length hair is found along the cheek, forehead, skull, and upper neck regions. Areas of long adorning hair are usually the lower face, the lower neck, and the forehead.

Adornment hair on an animal often includes beards, such as on the mountain goat, where the hair below the mouth suddenly becomes long. On the red fox, muttonchops appear where the cheek fur flares out away from the face. Full face and shoulder manes adorn the American bison, and ear tufts are visible on the bobcat.

The chest, upper shoulders, and back ridge of the leg and rump area as on the bull moose features long hair known as leg feathers. On the whitetail deer, a line of slightly longer hair often divides the animal's side and its belly region. The tails of many animals, such as the coyote, have longer hair or ending puffs of extra long hair. Good examples of bibs, the areas that lie below the face and flow away from the upper neck into the chest region, appear on wolves.

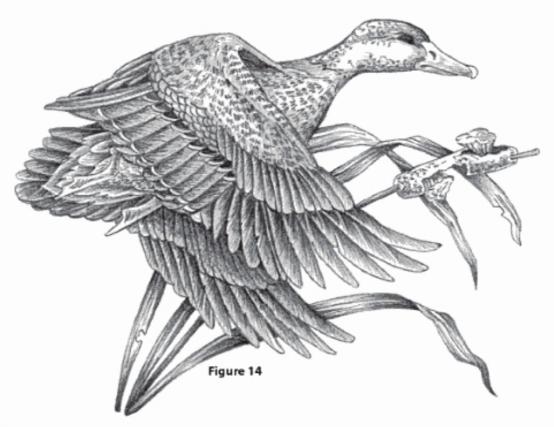
A second rule of thumb is that the shorter the hair, the finer the texture will be. Very long hair tends to be coarser than the hair along the body and the face, and has a different texture or curl than the rest of the animal. The mane of the bull moose is an excellent example of this difference.

Short hair follows the flow of the animal's body. An example is the fur covering the back and rib area of a deer. There, the hair flows both toward the tail region and downward toward the belly. The hair along the chest area flows from the upper neck down toward the legs, curving from the center of the chest back toward the ribs. Follow the detail lines of the patterns to create hair flow direction.

Short fur lies close to the skin and follows the flow of the body. Longer fur lies away from the body of the animal, flowing freely with the animal's movements. Long hair groups into small clumps that overlay one another. Remember to include some divisions where one clump becomes separated from another.

Within an area of long hair, as in a beard, the direction of flow from one clump to another can change. King of the Plains (pages 108–109) is an example of the movement you can achieve in these long hair areas. The buffalo's mane, beard, and forehead lock are blowing in the prairie winds. However, his muttonchops, chest bib, and leg feathers, which are not quite as long as the mane, are not wind-blown and closer to the lines of the body.

If you will be adding fur details with V-gouges or a bench knife, you will want to use shallow cuts with a tight angled V-gouge for the finer hair covering the face. Thick and long hair will need deeper cuts with a wide angle V-gouge. The step-by-step project that begins on page 47 explores carving fur in detail.



Feathers

Birds and waterfowl tend to follow the same generalizations with their feathering patterns (Figure 14) as animals do with their fur patterns. Fine feathers, called down feathers, are located along the facial area of the head, the chest and the belly region of a bird. Down feathers can be treated in much the same way as the soft, fine fur on an animal. There is very little distinction between one down feather and the next.

As you move away from the head toward the tail, the feathers gradually become wider, longer, and more distinct. The tops or shoulder areas of the wings are covered with fine, small, rounded feathers. Within the midsection of the wing, you will find several groupings of medium-length feathers. Long flight feathers are located at the end of the wing. The tail section of most birds begins with the fine feathers along the back. Next comes a grouping of medium feathers that fan the base of the tail where the tail meets the body. Again, long feathers, as with the wings, finish the tail section.

How an individual flight feather or tail feather is shaped depends on the species of bird. A Tom turkey has a huge fan of tail feathers, each ending in a blunt cut to the feather shaft. On the mallard drake, the tail includes two central feathers that curl back toward the head. Feather shapes can even change within a grouping. Again, watch the detail pattern and illustration for guidelines. Reference photos of the live bird will also help.



CHAPTER CHAPTER CHAPTER CHAPTER BUFFALO PORTRAIT

Buffalo Portrait provides a great carving pattern for beginning wildlife work. The closeup of his face provides the chance to learn basic techniques for creating realistic eyes, noses, and mouths. Because it is a large pattern, approximately 7" wide by 9" tall, there is plenty of room for detailing cuts and space in which to learn how to contour facial features. The project includes basic carving techniques, giving you a chance to work with both levels and layers within a pattern, as well as a variety of texturing cuts.

Buffalo Portrait carved in medium relief style. The pattern has been worked using levels and layers to give a stepped effect to the design. Worked on a ¾*-thick basswood board, the carving reaches ½* into the wood along the joint between the background and portrait. It has been finished with Danish oil. Note the beautiful color tones the Danish oil gives to the heartwood grain that runs through the center of the breadboard. (Patterns on pages 48–49.)

Buffalo Portrait





Getting Started

- Supplies:
- ¾* thick basswood plaque
- 9" x 12" tracing paper
- Tape
- Pencil
- Compass
- Dusting brush
- Depth gauge

Carving tools:

- Bench knives
- Straight chisels, ¼" and ¼"
- Round gouges, 1/2" wide sweep, and 1/4" narrow sweep
- Micro V-gouge, micro V-point chisel, V-point chisel ¼*
- Danish oil finish
- Burnt sienna oil paint
- Burnt umber oil paint
- Clean wiping rags



The bench knife, straight chisel, and wide sweep round gouge are the main tools used.



The bench knife, micro V-point chisels, and a wide ¾" V-point chisel create the hair texturing.



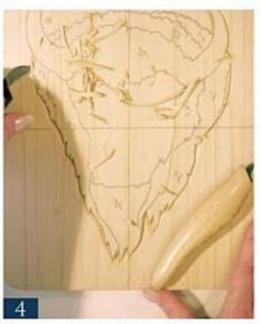
Before beginning any carving work, sand your project board well. Use fine-grit sandpaper, at least 220 grit or higher. Even though you will be removing much of the wood you are preparing, a smooth background ensures a better tracing surface for your design.



I create reference points in the pattern by folding the paper vertically and horizontally along the centerline. By matching up the lines on the pattern and the lines on the board, your pattern will be centered on the board.



With a pencil, number each level one through five, with one being the background and five being the face of the buffalo. Retrace lines that are light.



The first work area is the background. Create a stop cut along the outer edge of the buffalo portrait. Make a first cut with the bench knife held vertically to the board. Make a second cut with the knife dropped at an angle to open a V-shaped trough. The trough stops the gouge strokes from cutting into the buffalo's face.



Leave a small, uncut border area to frame the carving. Make a reference line to remind you where the gouge strokes should stop. Use a compass to mark a ½"-wide space along the edge of the board. The background gouge work tapers from this mark deeply into the face area.



Using a wide sweep round gouge, begin dropping the background area of the project. Work the gouge with the direction of the grain. As you work, recut the stop cut as often as needed to reach the depth of the background.



A depth gauge makes an excellent tool to check your cuts in this area. Once an even depth has been reached along the outer edge of the design, work the background down with the gouge until the background tapers smoothly into the pattern area.



With your bench knife and a straight chisel, drop levels two and three down. Level 2 stands about 16" up from the background. Level 3 reaches 14" away from this area.



You can roll the joint area of one level into an upper level where the two touch. By dropping or sloping the line, you will be adding to the feeling of depth in the final carving.



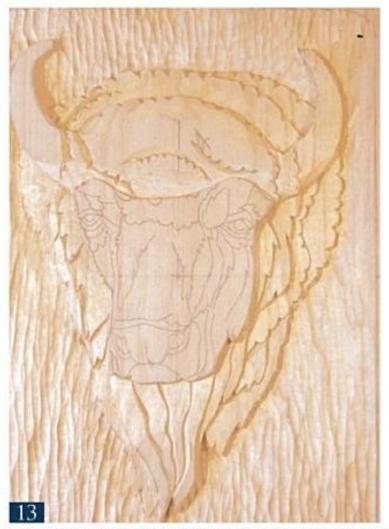
Level 4 of the buffalo contains both the forehead hair and the beard. When you begin dropping this level, allow the central area of the forehead to remain even with the original wood surface.



Cut your pattern along the level lines, separating each level section. Place each cut pattern piece in its proper position on the project board. Trace in the contour areas for each level.



With your bench knife and chisel, carve along each contour/layer area in Level 2, Level 3, and Level 4. Drop all three areas to their specific depths.



This is where your project should be in the carving process. Note the levels are becoming less notable as the layer areas are worked. The work on the layers blends one level into the next.



Use a straight chisel to round over the edges of each of the worked areas. Your bench knife can be used to cut in the sharp angles in the hair sections of the beard and cheek sections. Curve the hair sections along the mane in the upper skull area. Round over the horns until they become half-spheres.



Hold the straight chisel high on its edge and scrape along the joints in the carving, removing the loose fibers and evening the joint lines. Scraping over the entire surface smoothes any harsh ridges left from the chisel work.



Cut along the top and bottom edges of the eyelids. Round the eyelid areas using a straight chisel. The top line of the upper eye drops back into the face where it joins the eyebrow. The inside corner of the eyelids are the deepest points.



Use the bench knife to cut along the circle of the eyeball, freeing it from the upper and lower eyelids.



Use the straight chisel to round the eyeball. The eyeball should rest slightly below the level of the eyelids. Remember, one large sphere (the eyelids) surrounding the smaller inset sphere (the eyeball) comprise the eye circle.



Make a stop cut along the joint line of the upper eyelid and the top of the eyeball.



Use a narrow or tight sweep round gouge to create the pupil. Cut the gouge into the stop cut made along the top of the eye. The pupil is the opening in the eyeball that allows light to travel through the lens to the back of the inside of the eye or retina. By cutting a hollow into the eyeball, you create the same dark shadowed opening the natural eye has. This gouging of the pupil is effective on any portrait.



The buffalo's eye circle also contains a few small areas of fur along the sides of the eye. Round the areas using the bench knife and chisel. Carve the area where the eye is closest to the side of the face slightly deeper than where the eye flows into the muzzle.



Continue rounding into the cheek area. The cheek rests slightly below the eye circle and dips deeply as it reaches down toward the nose area of the face.



Blend the eye circle into the eyebrow area. The eyebrows are higher than any of the surrounding areas in the face.



Work next in the forehead area and blend this section into the hair area above the stop of the muzzle,

For Buffalo Portrait, the muzzle is deepest where it meets the forehead cluster of hair and then raises out toward the original surface of the wood where the nose joint is reached. The area also rounds over from the center of the muzzle down toward the cheeks and eye circle.





Cut the chin with the bench knife dropped deeply toward the beard section placing it below the upper lip areas along the muzzle. Shape the chin and mouth with the straight chisel.



Cut along the outline of the nostrils with the bench knife then drop the area back using a round gouge. The nose area is at the original level of the wood and only needs a light rounding over for shaping.



Using your bench knife and straight chisel, work over each area to give a final smoothing. Clean up any loose fibers along the joints. Use a fine grade of sandpaper, if necessary, to finish clean up. Remove any remaining dust and chips with a clean dusting brush.



Begin texturing the hair and fur of the buffalo at the forehead area. Because the hair changes direction at this spot, going both with and across the grain of the wood, use your bench knife to make these cuts. Make a small slice with the bench knife where the hair is to be cut.



Using a micro V-point chisel and working as much as possible with the grain of the wood, lightly carve in the fine hair along the muzzle, mouth, and chin. These are short, shallow strokes.



Use the micro V-point chisel for the medium-length hair along the eye circles and cheeks. The V-point chisel cuts are deeper into the wood and slightly longer here than those on the muzzle.

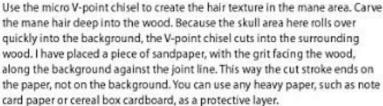


Use a ¾"V-point chisel for the long hairs in the beard. By moving to a larger chisel, the cut width increases, distinguishing the long hairs in the beard from the narrower cut of the micro chisel. Allow some of the chisel cuts to intersect or overlap other cuts to imply flowing beard hairs.



Use the micro V-point chisel in an upright position and with a push stroke to crisp the areas of texturing where one area joints another. Doing so removes the small triangle-shaped area left from the gouging cuts.





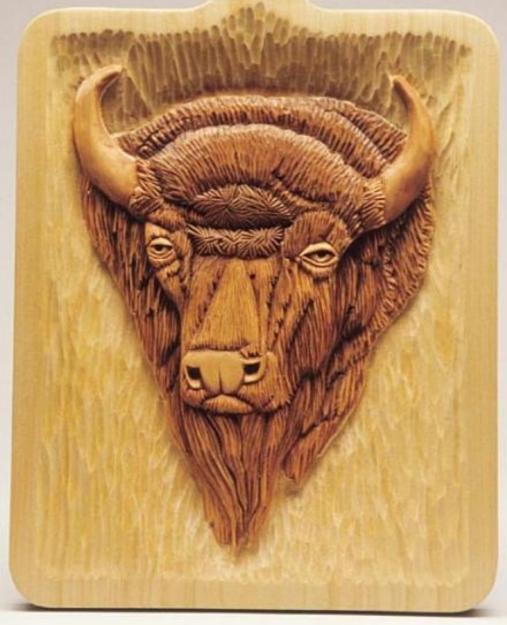


Complete the texturing along the outer edge of the portrait where a small amount of hair from the neck shows. Again, use paper over the background at the joints to prevent chisel marks in the surrounding areas.

When the carving is complete, brush the piece well to remove any fibers and chips. Apply one coat of Danish oil finish to the entire work and allow it to dry overnight. Next, using a mixture of burnt sienna and linseed oil, spot stain just the carved portrait. Keep the coloring agent off the background. Wipe the area with a clean cloth to remove the extra color. Add some burnt umber to your oil mixture and stain along the mane, beard, and side hair to further darken these areas. Wipe again. After the oil paint staining has dried well (several days), seal the piece with either Danish oil finish or several light coats of polyurethane spray sealer.



Buffalo Portrait, subject of the step by-step demonstration that begins on page 50, carved using the layer and level technique. Once the carving was completed, the facial areas were spot stained to emphasize the portrait. Note how the staining added darker areas of depth to the texturing work done with the V-gouge and bench knife. (Patterns on pages 48–49.)





CHAPTER FINISHING TOUCHES

A number of techniques work well for finishing your wildlife relief carving. My favorites include woodburning, oil finishes, and paint. This chapter provides instructions, tips, and hints on all three and more.

Mountain Goat Portrait is an excellent project for the woodcarver who is ready to add woodburning details to his projects. Each area of the goat's face features distinct hair lengths and patterns allowing you to explore the woodburning tool's texturing capabilities. Worked on a 34" basswood blank, this pattern was first contour carved and then the burn detailing was added. (Patterns on page 84–85.)

Woodburning

Using woodburning (pyrography) to detail a wildlife carving is a good way to augment one skill with another. After carving the contour areas of the animal, the woodburning tool creates fine details. Woodburning also shades the animal with wonderful tones from sienna to dark umber.

Adding woodburning to your relief carving requires a woodburning tool, fine (220 grit or higher) sandpaper, and a glazed tile.

Styles

There are two styles of woodburning tools.

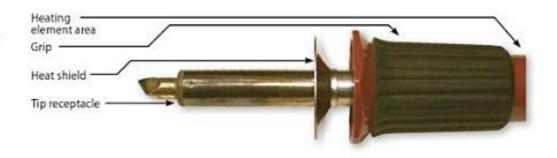
The most basic style is a one-temperature tool that heats to a pre-set temperature and uses solid brass interchangeable burning tips. The second style is the variable-temperature tool, which includes an adjustable thermostat unit

and plug-in woodburning pens that can have either fixed pen tips or interchangeable tips.

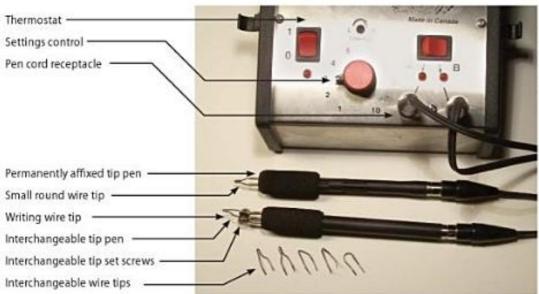
The Mountain Goat Portrait was burned using only a basic tip. It takes about five minutes for a woodburning tool to heat to a proper temperature after it has been plugged into an outlet. The tip heats to between 600° and 900° F. Because of the high temperature, rest the tool on a glazed tile or thick plate when you are not using it. Remember—the tip of the woodburning tool scorches anything it touches, including your workbench, sandpaper, patterns, and skin.

During use, carbon residue builds on the tip of the tool. The residue appears as a blackish color along the edge of the tool. The brass tip also may lose its natural yellow color and develop a brown coating. The carbon deposit or brown coating reduces the amount of

The one-temperature woodburning tool heats to one setting: high. It comes with several interchangeable tips.







Variable-temperature woodburners go from very cool to extremely hot. The tools are available with either fixed or interchangeable tips.

control you have over the burn stroke. Place fine grit sandpaper on the glazed tile and pull your heated tool quickly over the paper to remove the two residues while preventing the sandpaper from burning. Keep a sharp edge on your woodburning tool for those fine hair strokes by cleaning your woodburning tool in much the same way you would sharpen a carving chisel.

Speed Controls

Control the burn stroke by speed of movement, not pressure on the wood. Brass is a soft metal, and if too much pressure is applied, the thinner tips can bend at these high temperatures. Create fine lines with a quick stroke and a light touch. Allowing the tool to rest on the board and using a slow even movement will widen the burn line and darken the line's final color.

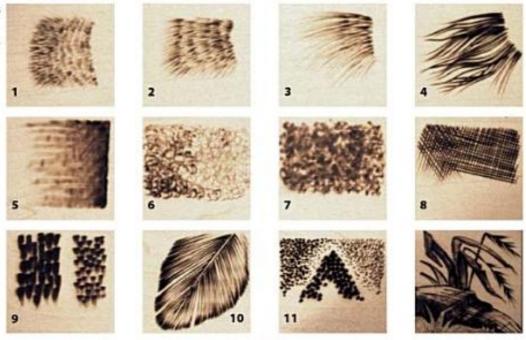
Three different areas on the basic tool create the burning. The blade is the main working part of the tool, The chisel edge runs down the front of the tip. The blade burns fine and heavy lines into the wood. In the photo at left, you will note the sharp tip point at the top of the blade. This point makes wonderful dot and teardrop patterns for dark shading. If your tool is laid over on its side, you can create background shading.

The practice board shown on page 64 displays some of the different patterns you can use in wildlife scenes. Starting at the top row, the first four patterns (Panels 1-4) are all made using the blade or edge. Allowing about one-third of the blade to touch the wood, pull the tool the length of the pattern line. Make fine hair by gently touching the burner to the design. Longer hair uses a touch-andpull movement, Roll the tool between your thumb and forefinger to make your line curve. Slowing the tool's movement across the wood creates the dark group of lines (Panel 4) representing long hair. The action allows the blade to burn into the surface, which widens and darkens the final stroke.

Background Shading

The patterns in the second row are background shadings. Lay the tool over on its side to do the first (Panel 5). Let about one-fourth of the tip's side contact the wood. Begin with the blade at the line where the darkest part of the shading is to be and then

This practice board shows a number of effects a woodburning tool makes. The number on each square refers to specific information in the text.



pull away from the line, gently increasing your speed. The movement creates a graduated coloring in the area. This is a good technique for mountains, paths, and rocks. The next two patterns (Panels 6 and 7) are made with the tip or point of the tool again tilted slightly on its side. Move the tool in a random swirling pattern. The more the tool is turned on its side, the wider the swirl pattern becomes.

Make the last pattern (Panel 8) using the blade to create a crosshatched effect.

In row three, several patterns can be used in specific areas of wildlife patterns. Create the first (Panel 9) by turning the tool on its side with about one-half of the side in contact with the wood. Rest the tool in one spot for a brief moment, with no pulling or movement.

The second pattern (Panel 10) is a simple feather. Create the body of the feather in three steps, using the blade edge. First, burn the central lines of the feather to create the shaft. Then, starting at the shaft, pull a set of fine lines by moving away from the center shaft and toward the outer edge of the feather, Make a second set of strokes by burning in reverse—

starting at the outer edge of the feather and pulling toward the shaft.

Just the Tip

The tip of the tool burns both fine and heavy dots (Panel 11). As with the bark stroke, allow just the tip of the tool to touch, then rest, on the wood. The longer you hold the tool in one area, the larger the dot becomes.

When you are finished burning, use your woodcarving tools to clean up any stray burn marks on the background of your work. The burns are shallow, so a chisel or wide gouge works well. If you are new to woodburning, practice on a scrap board.

When you are finished burning your project, you have several options for finishing the piece. Danish oil finish (see page 67) leaves burned areas dramatically dark and crisp compared to the natural tones of the unburned background on the carving. As an overall covering, wood stain (see page 68) tones down the difference between burned and unburned areas, and minimizes the contrast of colors.

Tutorial: Burning the Mountain Goat Portrait

Step 1: The fur that covers the eye circle, muzzle, forehead, and ears is usually the shortest hair on the animal. This is a very fine, soft covering. Because the hairs are so short, the flow of the fur follows the curves of the face underneath them. Note on the centerline of the muzzle that the woodburning stroke begins toward the nose and ends toward the forehead. By the time the hair has reached the cheek area, the burning stokes now go from the center of the muzzle toward the cheek. Use an extremely light pressure with your tool and quick little burns in these areas.





Step 2: Moving into the cheek and mouth area, you will find hair slightly longer than the hair along the muzzle. These also follow the curvature of the facial areas. Along the region that surrounds the lips, the hair will curve to create a semi-circle. This will emphasize the roundness along the mouth. Again, use a quick light stroke with the burner.



Step 3: Moving into the neck and jawline areas, the fur becomes noticeably longer and coarser and groups into small clumps or strands. Where the fur ends in one area of the face and overlaps another, as along the jawline in the photo, you can cut splits along the edge of that section of hair. To make this stroke darker and deeper, slow down your movement. The longer the tool touches one area, the darker that area will become.



Step 4: One of the great features in carving wildlife is the assortment of manes, beards, and mustaches that adorn animals. The mountain goat sports a full beard that flows back into mutton-chop side burns. Along the longer lower third of the neck, he has another area of long hair, called a bib section. The longer the hair in an area, the more random the flow pattern. Here, clumps of hair are larger and more distinct. It is a slow movement. Roll the tool between your thumb and finger to create the curves in the hair.



Step 5: Darken the inside of the nose, eyes, and ears to almost a black tone by allowing the tool to rest on that area. These places have been created with a series of small dot strokes using just the tip of the burning tool. Fine lines are used to imply the growth rings on the horns.



Step 6: Placing the burning tool on its side and quickly pulling it along the wood can add shadowing. Start your stroke where you want the darkest part of the shadow and pull away into the paler region. On the mountain goat, I darkened the corner of the eye circle where it meets the muzzle, behind the ear in the skull area. I also darkened the line that forms the mouth opening. (Finished piece on page 60; pattern on pages 84–85.)

Danish Oil Finish

The finished carvings shown throughout this book were finished with Danish oil, an easy finish that is an especially good choice for beginner carvers.

Danish oil slightly darkens wood, Creamy white basswood takes on a golden caramel coloring. Butternut achieves a lovely silver-brown tone with oil, and sugar pine develops a reddish-gold finish. Danish oil has a beautiful, soft, semi-gloss sheen when dry.

To finish your carving with Danish oil, first pour a small amount of the finish into a clean pan. You will need newspaper to protect your workbench: soft, clean cloths; and a wide soft-bristled brush. I use a large fan brush from an art supplies store. The brush provides wide coverage and good distribution of the oil. Dust your project well before applying the finish. Brush one generous coat over the entire piece. Saturate the surface with oil but avoid large standing puddles. Let the coat of oil soak into the wood for about fifteen minutes.

Use a soft, clean cloth. Wipe off any oil on the high spots of the carving. For successive coats, wiping becomes more important.

Use your brush to work any remaining excess areas of oil out of the deep pockets of the carving. Wipe again. Let dry overnight.

Danish oil can raise or lift the fine wood fibers missed during clean up. Once the first coat is dry, use an old toothbrush to vigorously rub the carving to remove loose fibers.

Apply a second and third coat as desired. Each new coat darkens the wood's color tone and heightens the final shine of the work. Oil finishes can be buffed to a high shine using a terry cloth or chamois cloth.

Remove any oily rags and papers from your studio or workshop immediately. These items are flammable.

Tutorial: Applying Danish Oil to Buffalo Portrait



Step 1: Apply a generous coat of Danish oil over the entire piece using a large fan brush. Saturate the wood, but avoid standing puddles.



Step 2: Let the carving stand for 15 minutes, and then wipe off any excess oil with a soft, clean cloth.



Step 3: Using a brush, work any excess oil out of the deep crevasses. Apply a second and third coat as desired.

Step 1: Seal the surface with one coat of Danish oil, and then use a softbristled brush to apply a light coat of stain.





Step 2: Wipe off any extra stain with a cloth.

Wood Stain

I often leave the wood's natural coloring, but there are times I stain either the entire piece or areas of a carving to add interest. The grizzly bear is done on butternut, but because it is a low relief carving, I want to add a little color drama to the finish. To do so, I used artist oil paints and linseed oil. Spot staining emphasizes the scene you have carved.

Using wood stain is not complicated. Apply one coat of Danish oil finish as described on page 67. Allow it to dry overnight. This finishing coat will give you more control over the next steps and prevent the stain from soaking too deeply into the wood.

In a small pan, mix one-half teaspoon of oil paint and three teaspoons of linseed oil. Test the paint mixture on a scrap board of the same wood as your carving. More paint can be added to darken the color. More linseed oil can be added to lighten it. For the grizzly bear, I am using raw umber. Raw umber, burnt sienna, Vandyke brown, and raw sienna all are beautiful colors to use. *Howling Bluff* (finished project on page 72, pattern on pages 104–105) is stained with burnt sienna.

Use a soft-bristled brush to apply one light coat of this mixture to the work. For Salmon Fishing (finished project photo on page 36, patterns on pages 124–125), I am painting only the carved areas. Spot staining accents your carving and separates those areas from the background part of the design. Work a small area of the piece at a time. I do not bring the oil mix all of the way down to the edge of the carved area when spot staining. I leave a small line uncolored to prevent the oil mix from running onto the background wood.

Using a clean cloth, wipe off excess paint.

Along the edges of the spot-stained area, wipe from the background area into the coloring to prevent stain from accidentally being deposited or pulled into an area where you do not want color. With each new wipe, fold your cloth to a new unused area. Repeat the process until the entire area to be stained is colored.

On the Howling Bluff chest door, a few areas along the left side are neither background nor part of the carving design. In these places, I reuse part of the cloth to rub a thin translucent layer of paint over the wood. The dirty parts of the cloth carry just enough coloring to tone these areas. This gives a nice blending or transition color to the edge.

The oil paint stain needs to dry overnight.

When it is completely dry, complete the piece
with a second coat of Danish oil finish.

Dry Brushing

After completing a carving project, you may wish to add color to your work. The dry brushed oil paint technique is a simple and quick way to highlight the textured details of your relief carving. Before starting any color work, make sure the piece has been thoroughly dusted to remove any chips and fibers left from texturing.

Dry brushing applies extremely small amounts of color to a detailed carving. As you pull the brush bristles across the surface of the work, color adheres only to the high areas allowing your staining color to remain in the deep crevices.

With clean turpentine, dampen a 34" or 14" flat brush—either sable or bristle will do fine. Blot the brush well on a clean cloth so there is little turpentine remaining in the brush. Pick up a small amount of color on the edge of the bristles and work the color deeply into the brush. You should see the individual brush hairs in the color on the brush. If you cannot, you are carrying too much color.

Hold the brush at a slight angle to the carving and gently pull the tip over the top of the work. Do not scrub down into the depths of your design. Just caress the top surface, pulling against the grain of your gouge work and allowing the color to highlight the ridges of your work.

Dry brush an area several times to build up the color tone. Colors also may be intermixed, adding layers of different colors for both shading and highlighting. Use some colors in a random hit-and-miss approach for color interest.

Because basswood, the wood used in Watchful Eyes, is a porous and absorbent wood, it is best to seal the woodcarving before color is added. Apply one coat of Danish oil finish to the entire project. Allow the piece to dry overnight.

A Danish oil alternative is a base oil coating made of approximately one tablespoon of turpentine with one teaspoon of linseed oil. Flood the carving with the mixture, getting it into all crevices of your work. Apply a second coat immediately and saturate the wood so oil paints can be applied smoothly. Allow the finish to set overnight before painting.

Prepare the completed carving with one coat of Danish oil finish mixed with burnt umber. Allow it to dry overnight. Place a small amount of each color on a glass tile for easy loading of the brush. I also have on my worktable some clean cloths and turpentine for cleaning up between colors.

For the wolf project shown on page 71, begin by dry brushing dark gray on the wolves' bodies.

Mix a small amount of lamp black with titanium white until you have a dark gray tone. Use the mixture to dry brush the dark gray of the wolves' bodies. Load a flat shading brush with the dark gray, and then work as much color off the brush as you can on a clean area of the tile. Remember, little color is carried on the bristles when dry brushing. Pull the brush across the grain of the carving to apply your first coat of color to the wolves' bodies. The first coat will be barely visible.

Add more titanium white to the dark gray mixture until there is a noticeable contrast to the original dark gray tone. Dry brush the pale gray mix across the wolves' bodies. Allow some areas of the dark gray to remain. On the wolf that is lying down, the dark gray remains along the backside of the face and bib. The standing wolf still has a dark gray area behind its head and neck.

Emphasize the depth of the carving by adding painted shadows along the joint lines. I used lamp black to shade the joint of the head and body of the standing wolf. Black also has been added to the lying wolf along the inside of the bib (where the bib meets the body) and under the cheeks and muzzle where the muzzle touches the neck. Burnt umber and Vandyke brown are also excellent shading colors.

Add titanium white highlights to the eyebrows, cheeks, and the side of the muzzles on the wolves' faces. Hit the tips of the ears with white. Apply a thinner coating to the belly area on the lying wolf and to the sections of the bib on the neck area.

With a clean, dry brush, gently blend the colors throughout the wolves' bodies to soften the coloring and give a more natural look to the coloration of the animals. Try to even any areas of heavy paint application. Any time you apply paint too heavily, it can be easily blended out into the surrounding colors with a dry clean brush so you can reapply color to that area.

With a detail or liner brush, apply lamp black to the eyes, the nose, and the inside of the ears. Load the brush with color, and then gently roll any excess paint off the tip. This color is applied more heavily than the dry brushed colors.

This same dry brushing technique can be carried into the background elements of the scene. On the tree trunk and branches, apply burnt sienna followed by a shading coat of burnt umber and highlights of yellow ochre. Coat the foliage areas first with Verde or Thalo green, and then shade them with burnt umber. Finally, add highlights with titanium white. Paint the rocks with a medium tone of gray, and then shade them with a darker tone of either blue-gray or burnt umber-gray. Highlights, as with the leaves, are done with a light coat of titanium white.

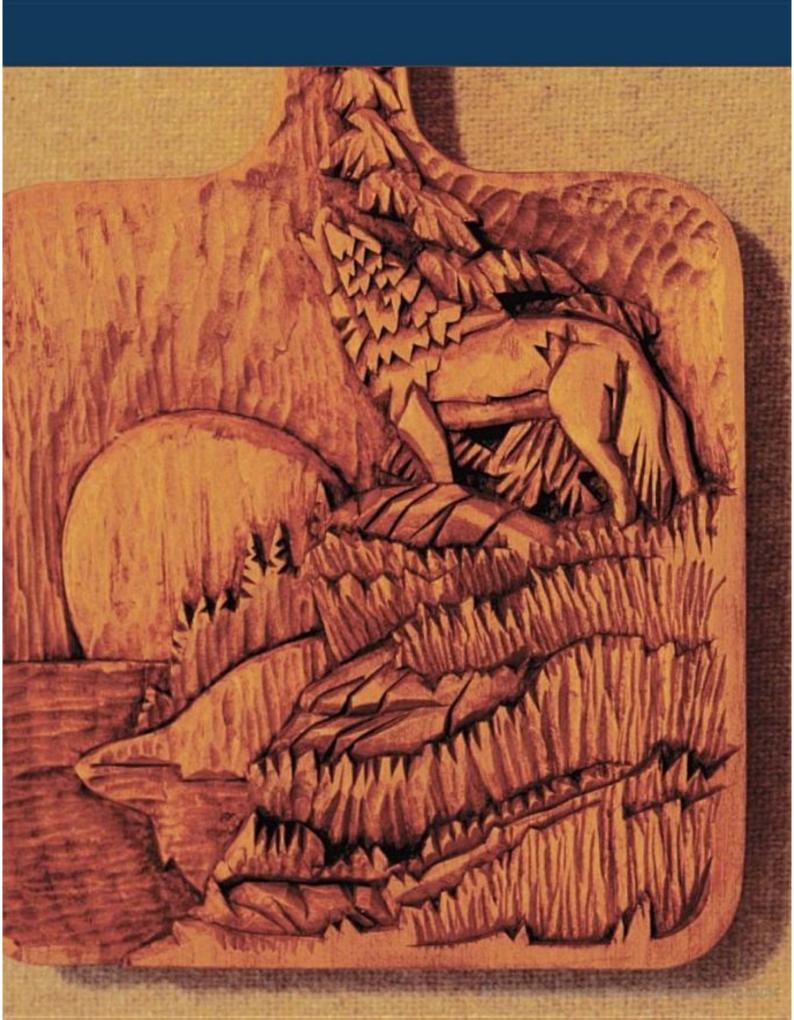
If the scene includes a sky, use a mixture of medium blue gray as the base coloring, then shade it with a darker blue gray along the horizon line and wispy titanium white clouds in the upper part of the sky. For this scene, the wolves are carved in a forest or wooded setting and the background should be filled with trees.

To create the forest scene, load a shader with the darkest green oil paint. Paint the area instead of dry brushing, keeping a fair amount of paint on the brush. Using a shader brush, apply one coating of Verde or Thalo green for the base coat of the trees. Shader pine trees are easily made by holding the brush in an upright position. Tap the tip of the brush on the wood, creating a crisp line. Note that a series of shader taps makes up the boughs of the trees. Work the lines from the centers of the trees out toward the edges. Add mediumtoned highlights with yellow ochre along one-half of each pine to round out the trees. Finish off the trees with a fine highlighting of titanium white on top of the yellow ochre.

Note the finished grouping of pines in the background. The flat look of the distant pines gives the eye something to set off the depth in the rest of the carving. The carved branches, the tree trunk, and the wolves become a detailed three-dimensional frame for the small window into the background. Allow the finished painting to dry for several days. Seal the project with several light coats of polyurethane spray sealer.



Dry brushing adds beautiful color to this finished relief carving of Watchful Eyes (pattern on pages 128–129).



CHAPTER PATTERNS & ILLUSTRATIONS

The patterns in this section appear in two formats. The first is a detailed pattern to guide you in the level and layer work of your carving. The second format is a shaded pencil illustration establishing the contouring and depth of each area.

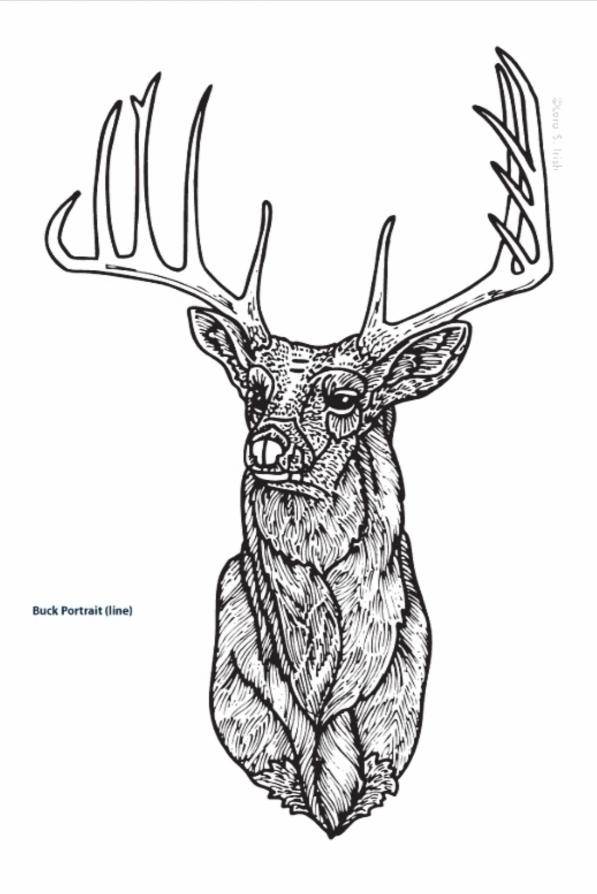
The patterns are also broken down into portraits, and full-body and mantel-sized scenes. Portions of each scene can be broken out to create patterns, allowing you to create complementary works of your favorite North American wildlife. Additional scenes appear within patterns.

So whether your taste in carving patterns is the facial portrait, an animal in a natural setting, or a scene full of drama and action, I hope you will discover many hours of carving ideas and fun in these designs.

Wildlife carvings focus on creating as realistic an animal as possible. The carving emphasizes the animal, not the technique used to create that animal. However, Howling Bluff (patterns on pages 104–105), reverses the emphasis. Here, the carving techniques are the most important part of the work; the coyote design is secondary. Each gouge cut, V-chisel stroke, and bench knife slice is allowed to show. The finished design is very angular, again emphasizing the carving techniques, not subject.



















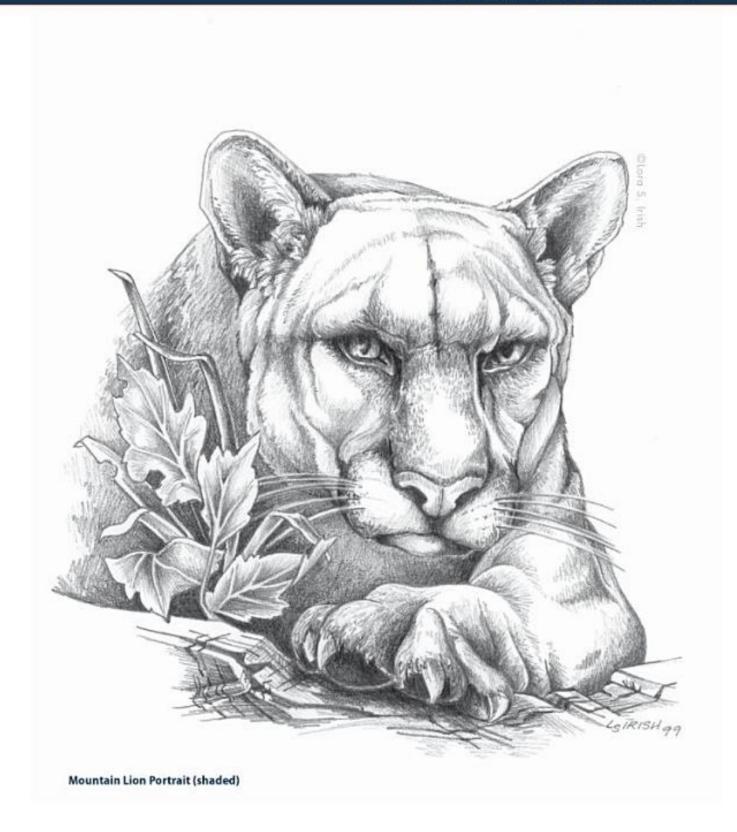






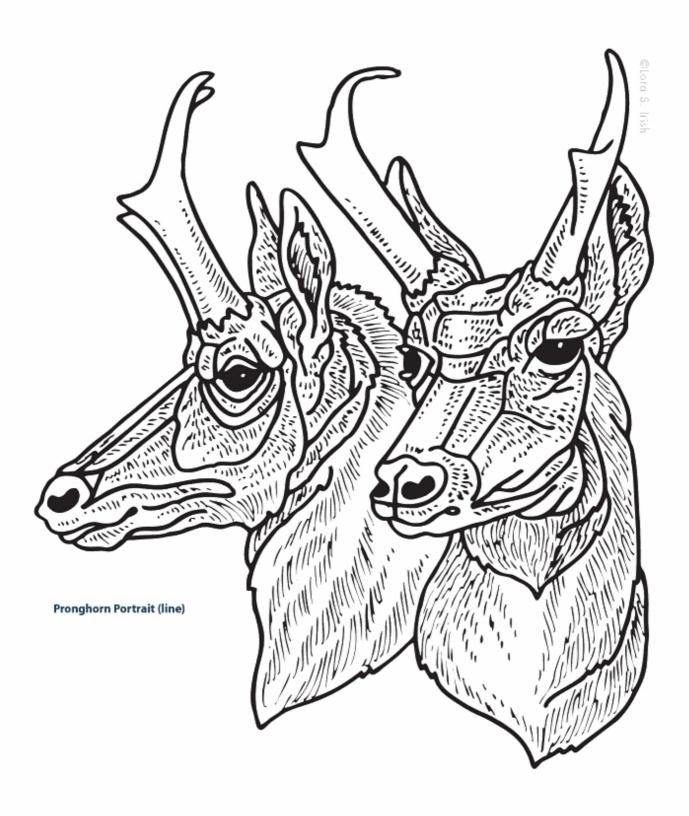


Mountain Lion Portrait (line)

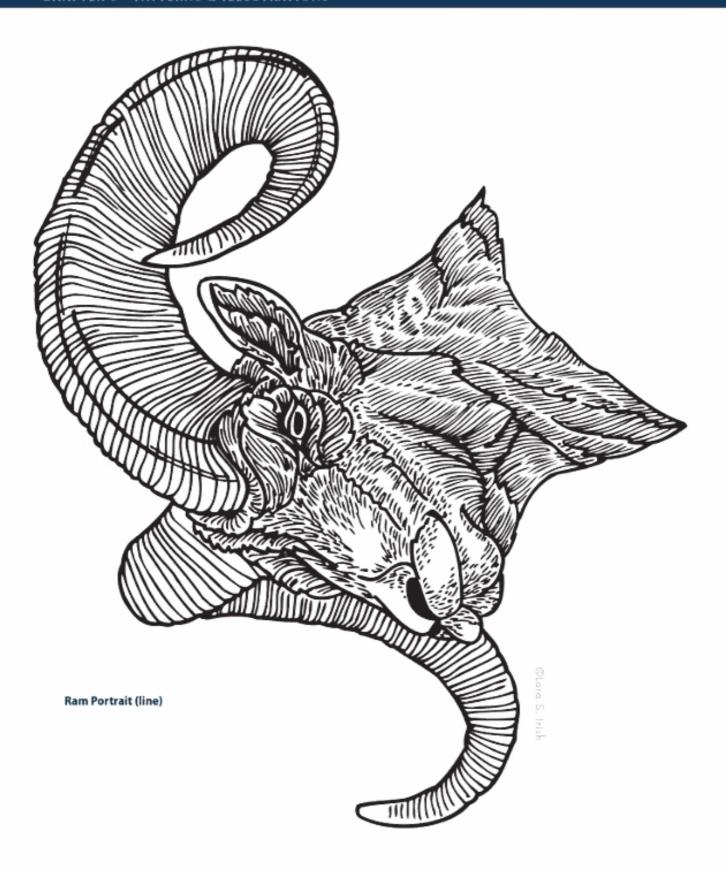


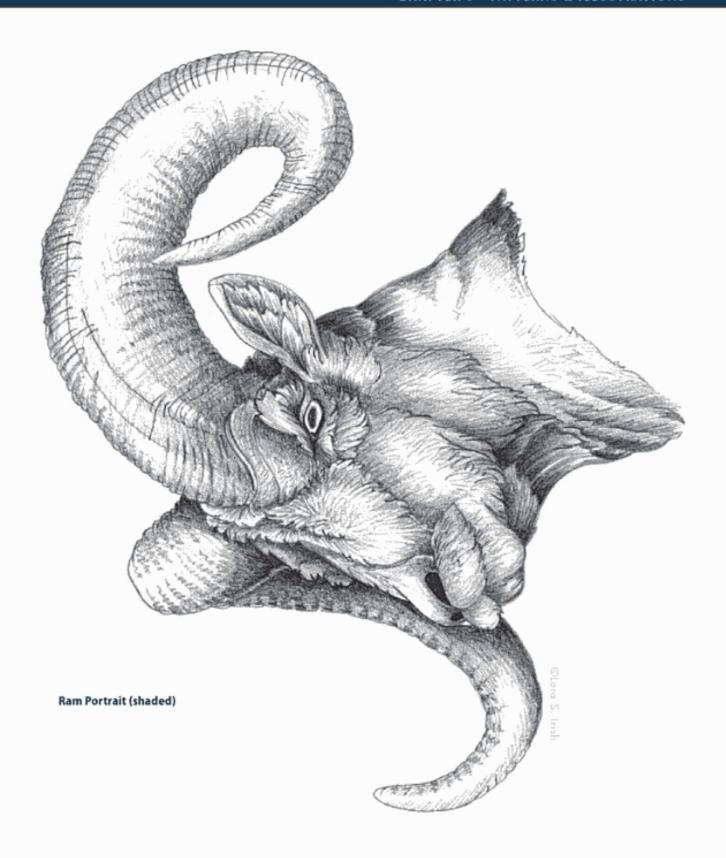














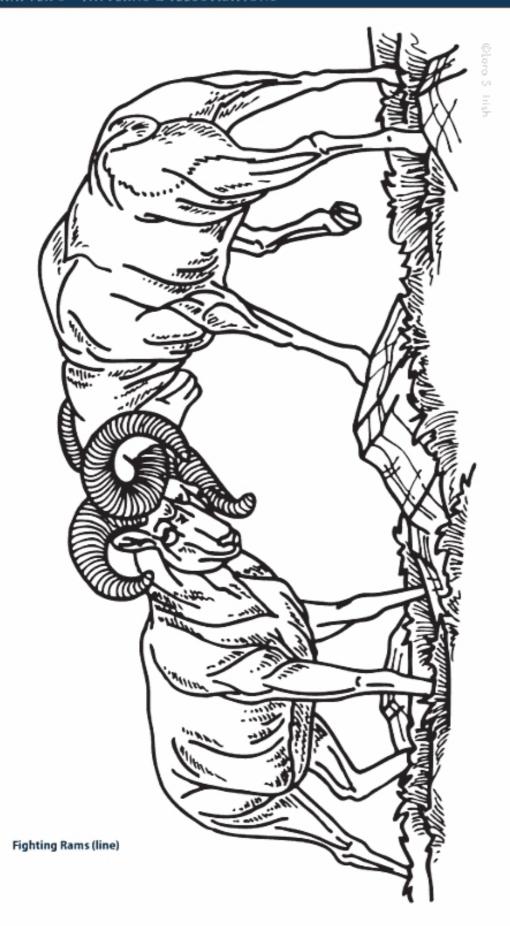








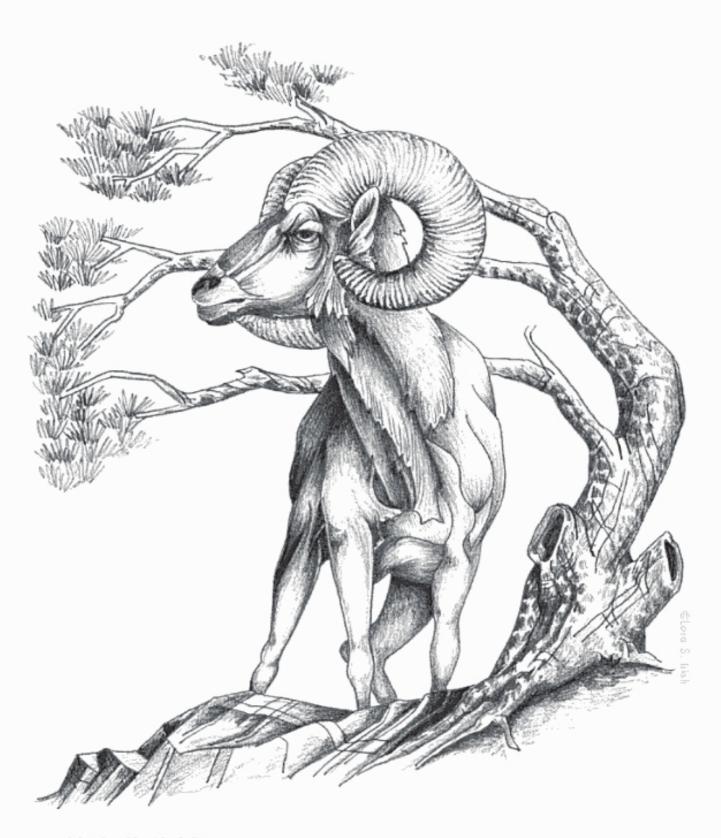








High Point Ridge (line)



High Point Ridge (shaded)















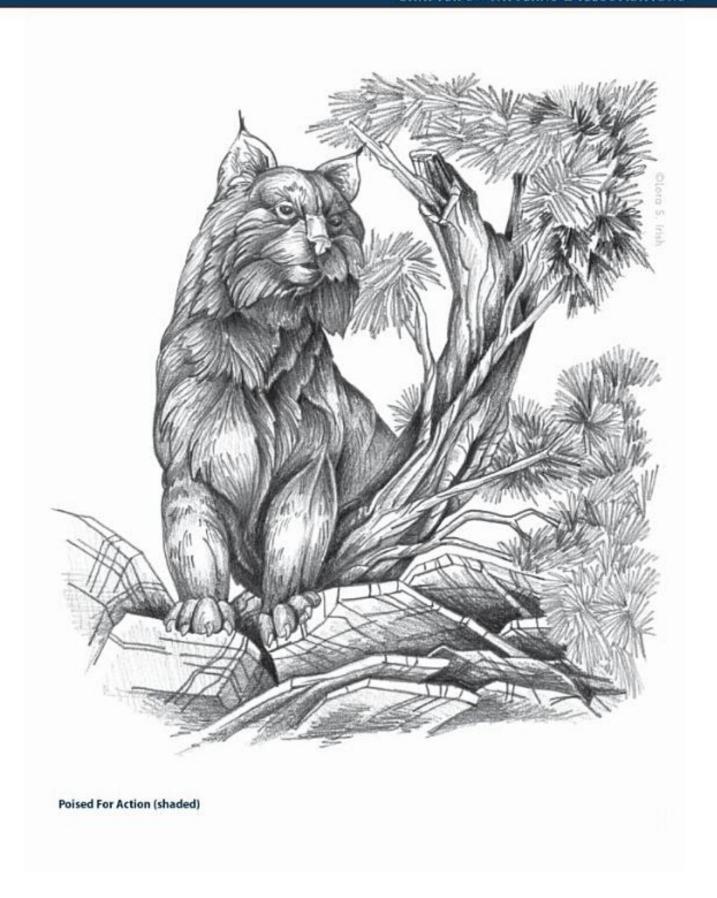








Poised For Action (line)





Prairie Sunset (line)



Prairie Sunset (shaded)









Red Fox Resting (shaded)







Salmon Fishing (line)



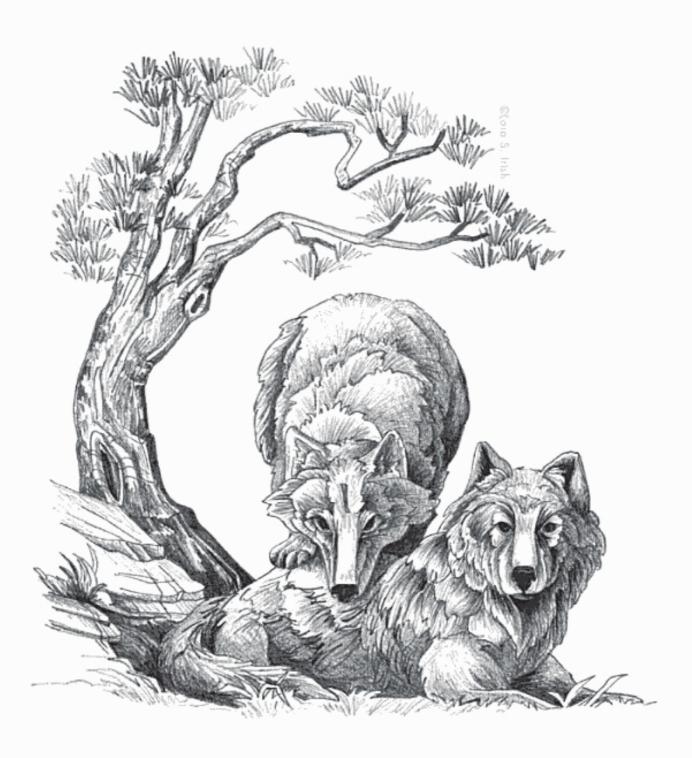
Salmon Fishing (shaded)



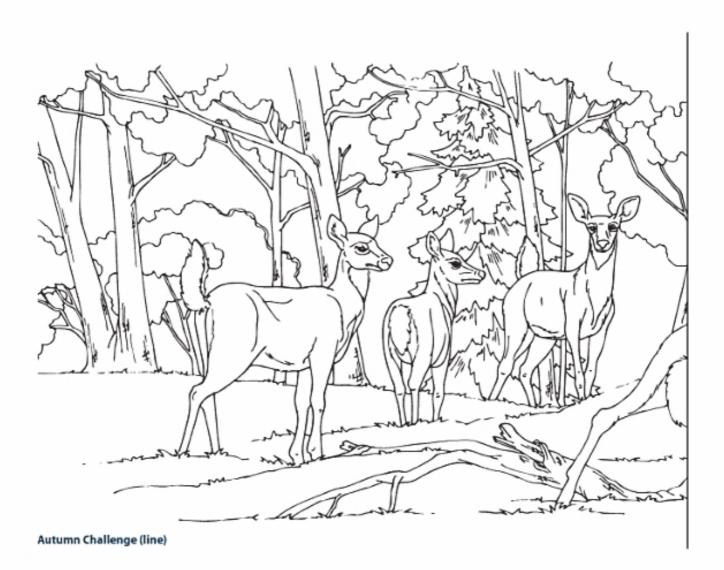




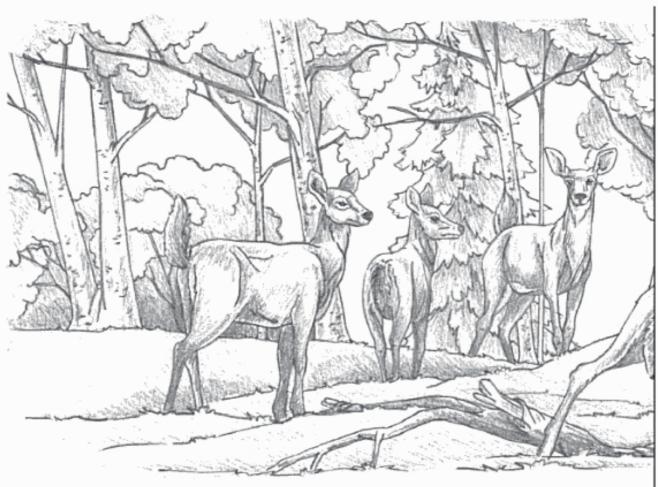
Watchful Eyes (line)



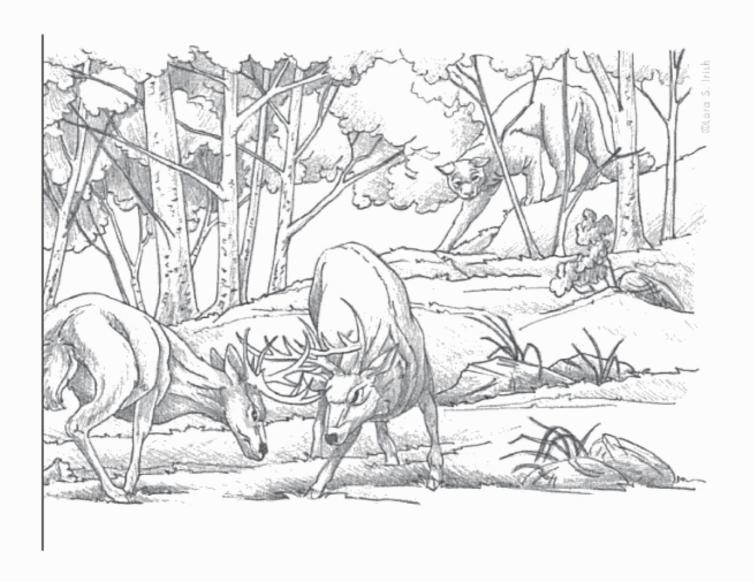
Watchful Eyes (shaded)

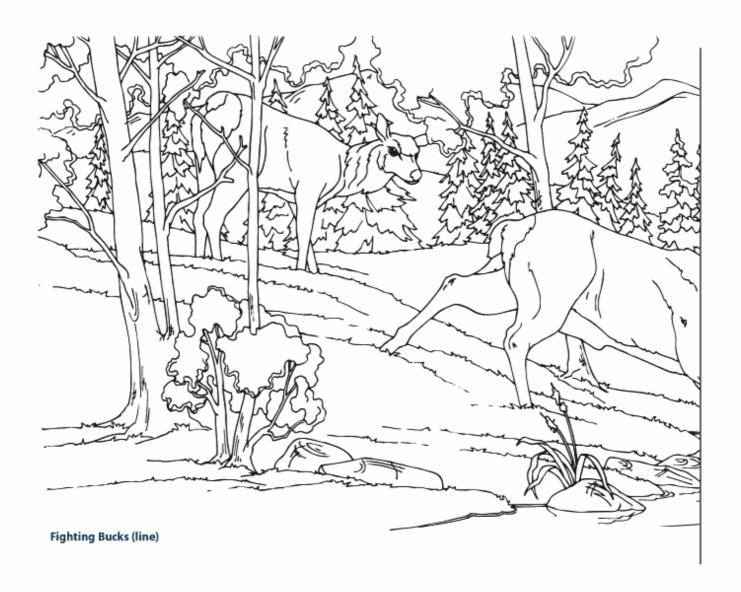




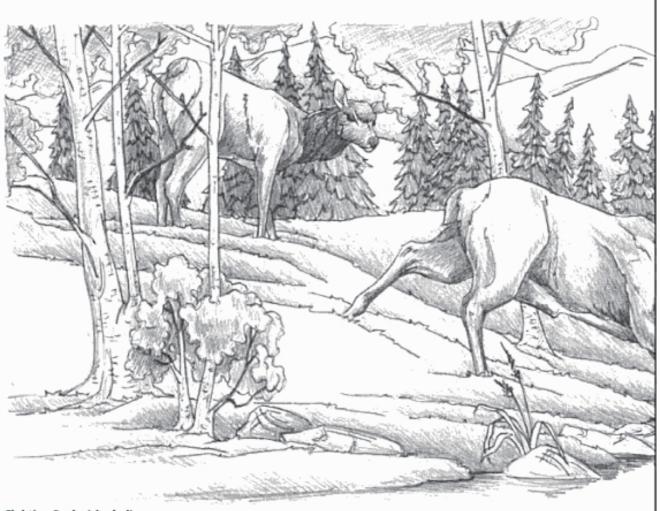


Autumn Challenge (shaded)





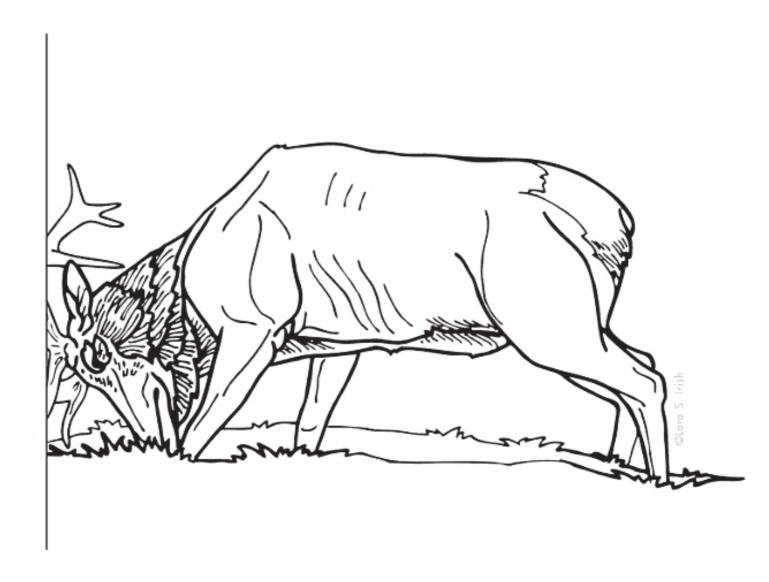


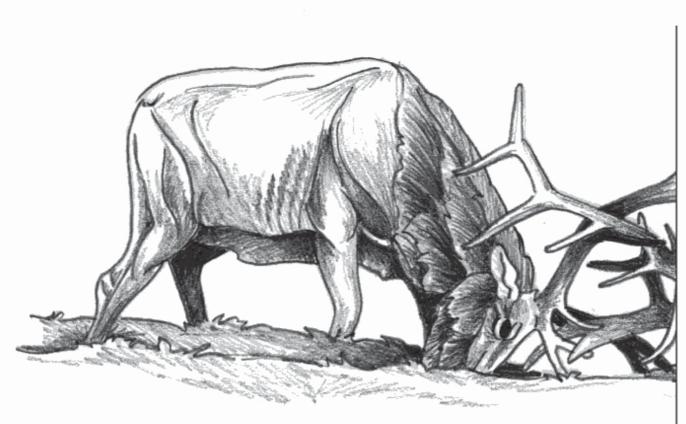


Fighting Bucks (shaded)



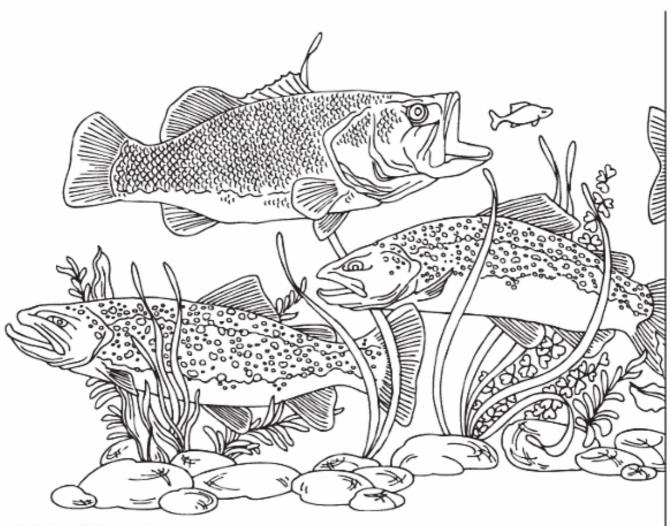




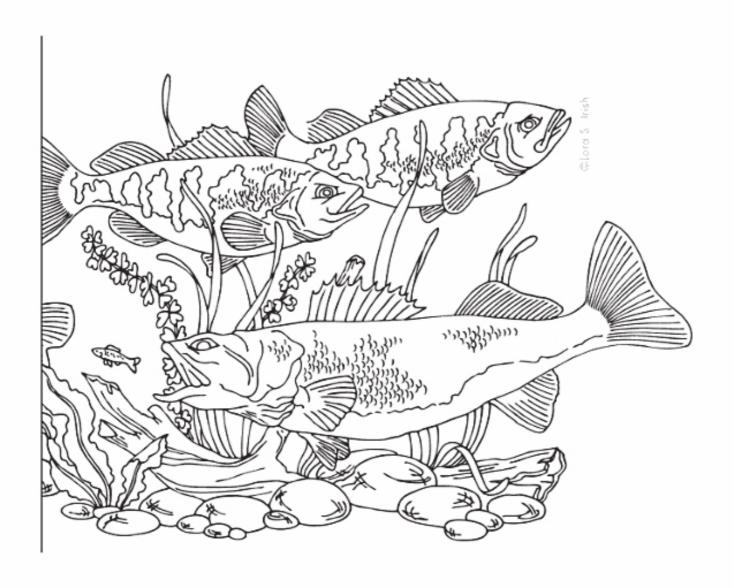


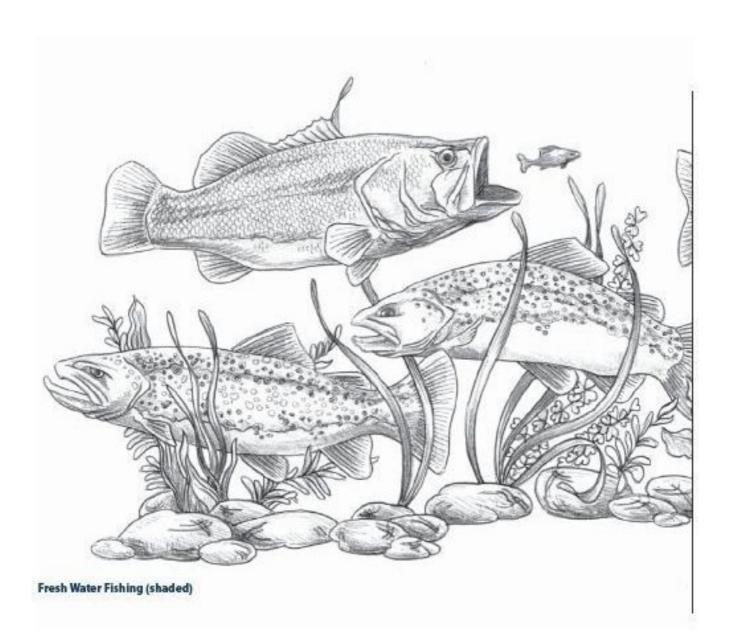
Fighting Elk (shaded)

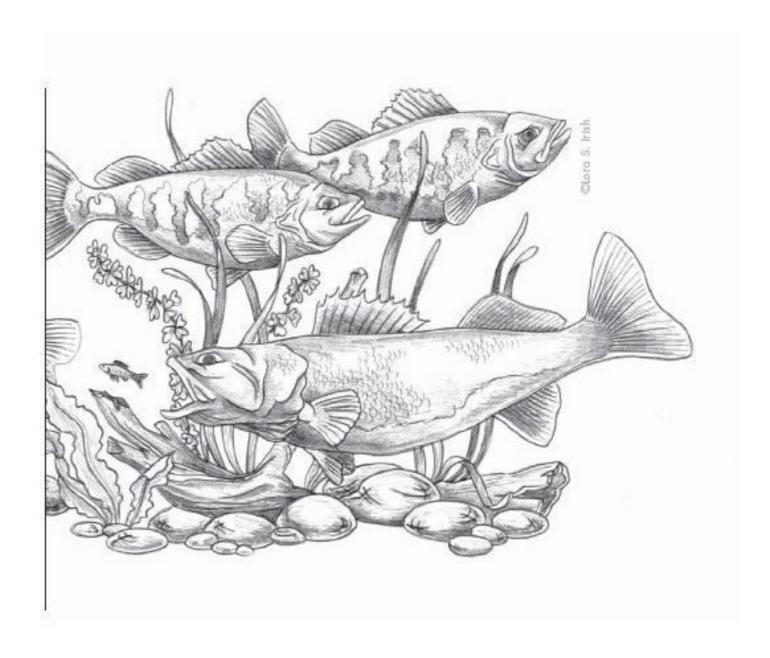


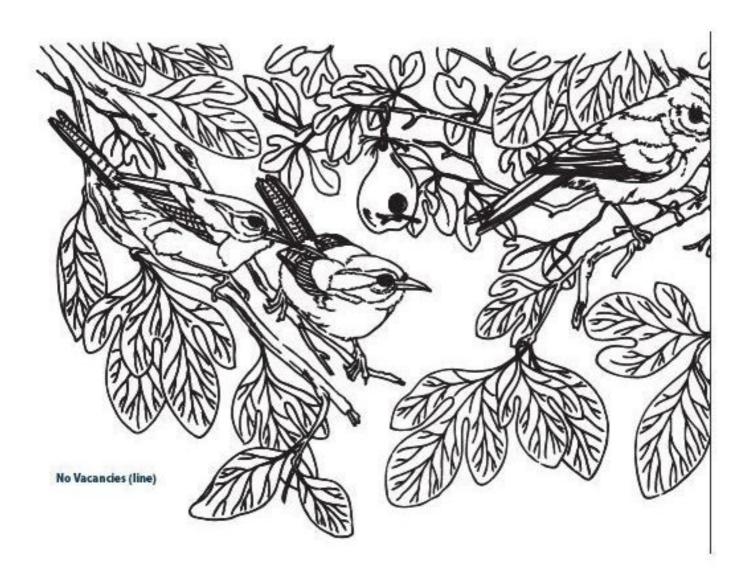


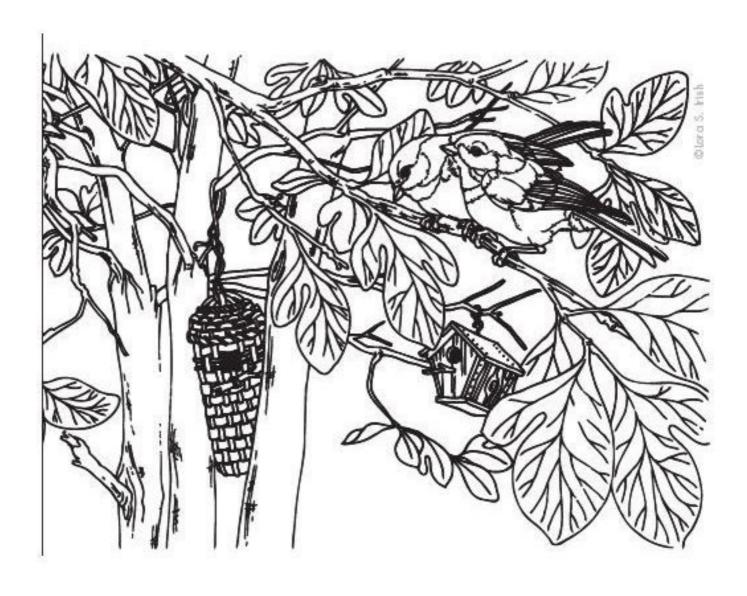
Fresh Water Fishing (line)





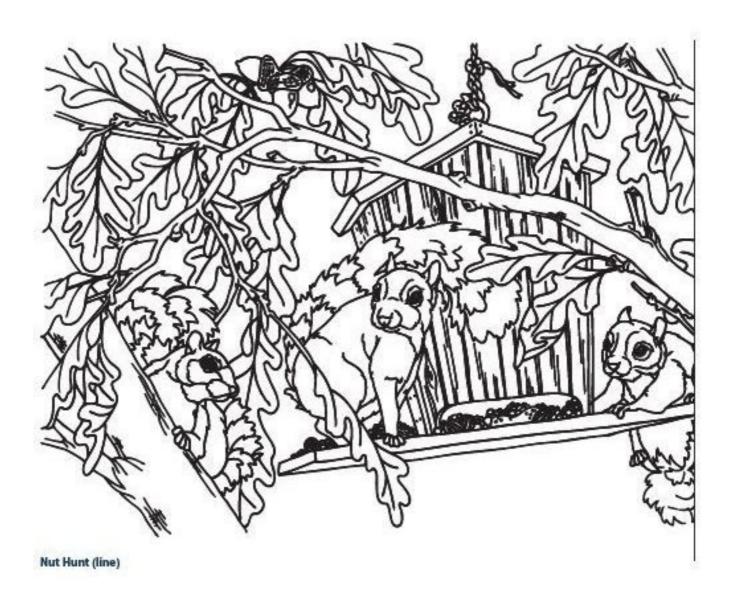




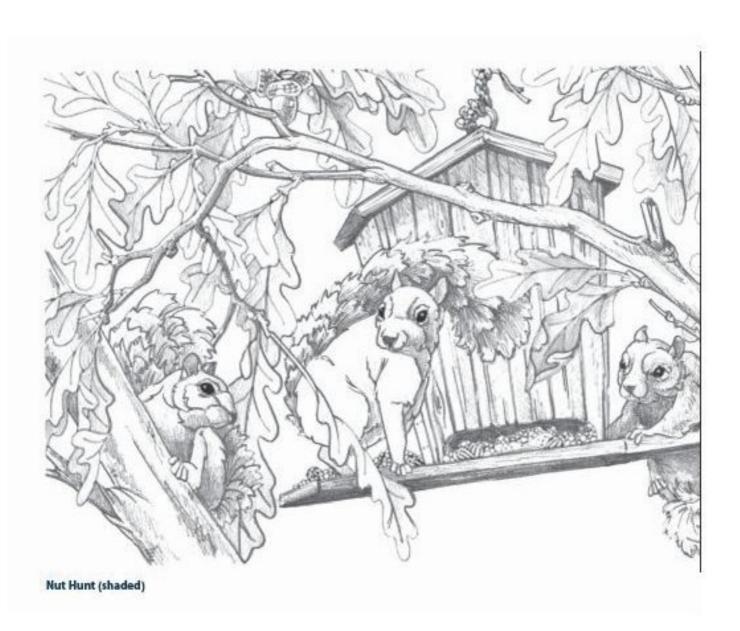




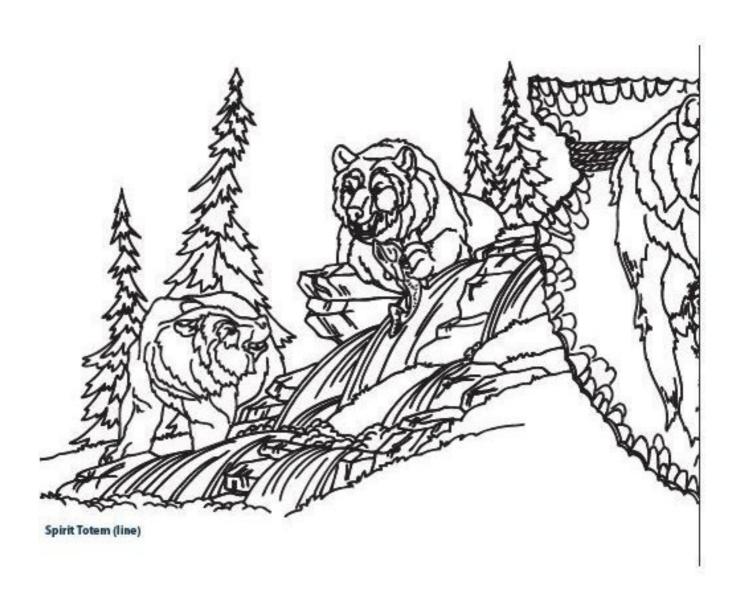








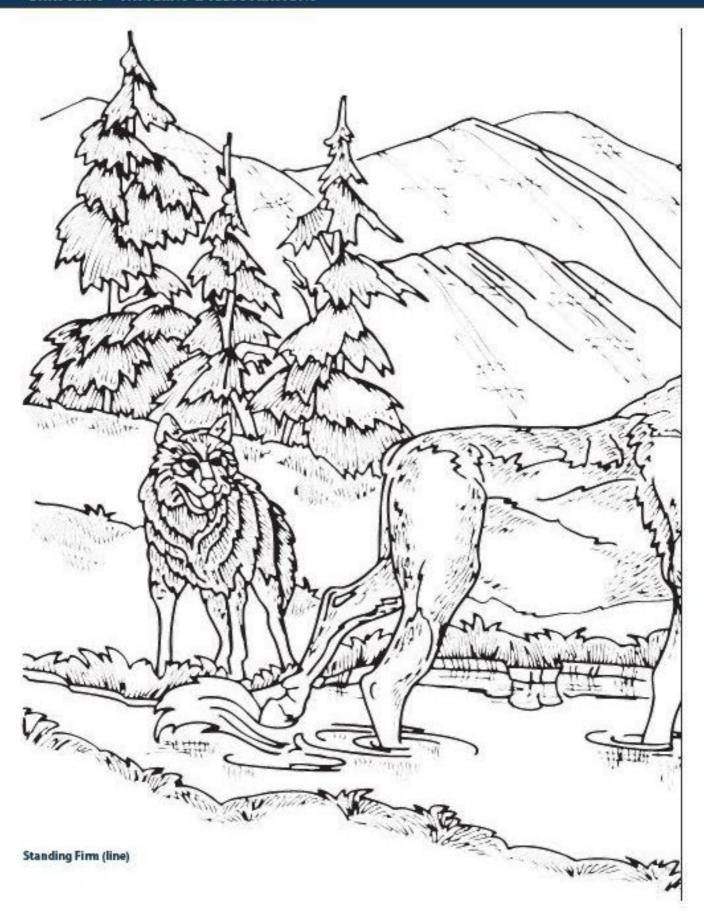




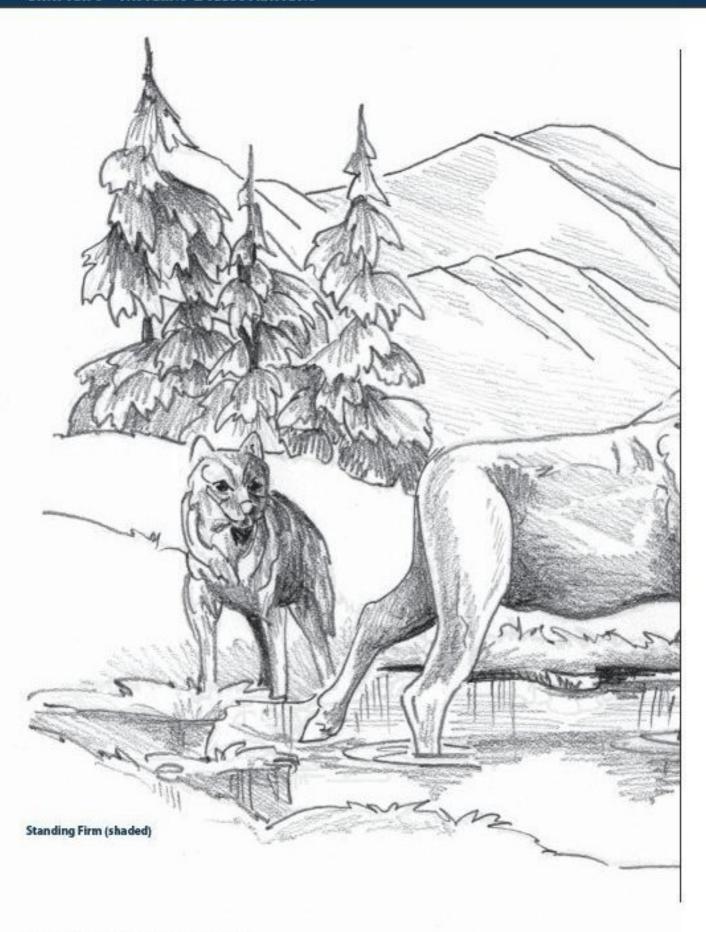




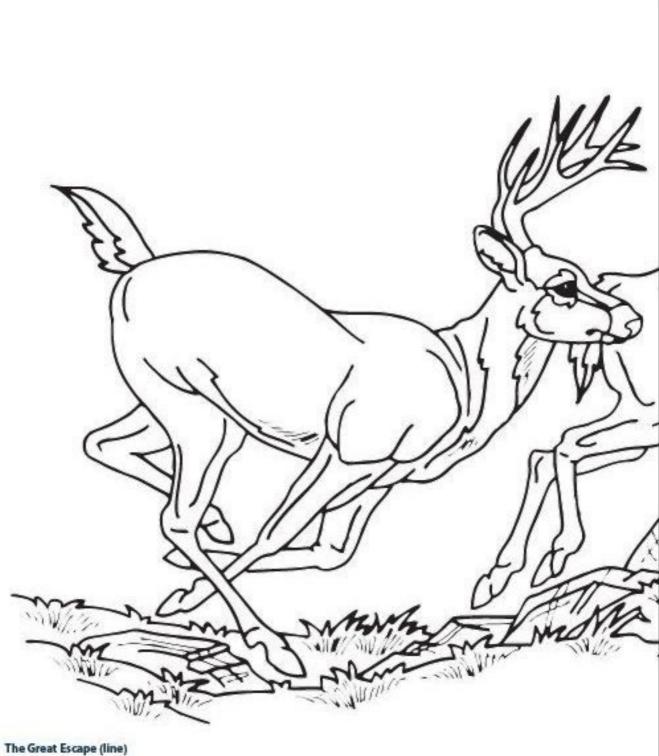


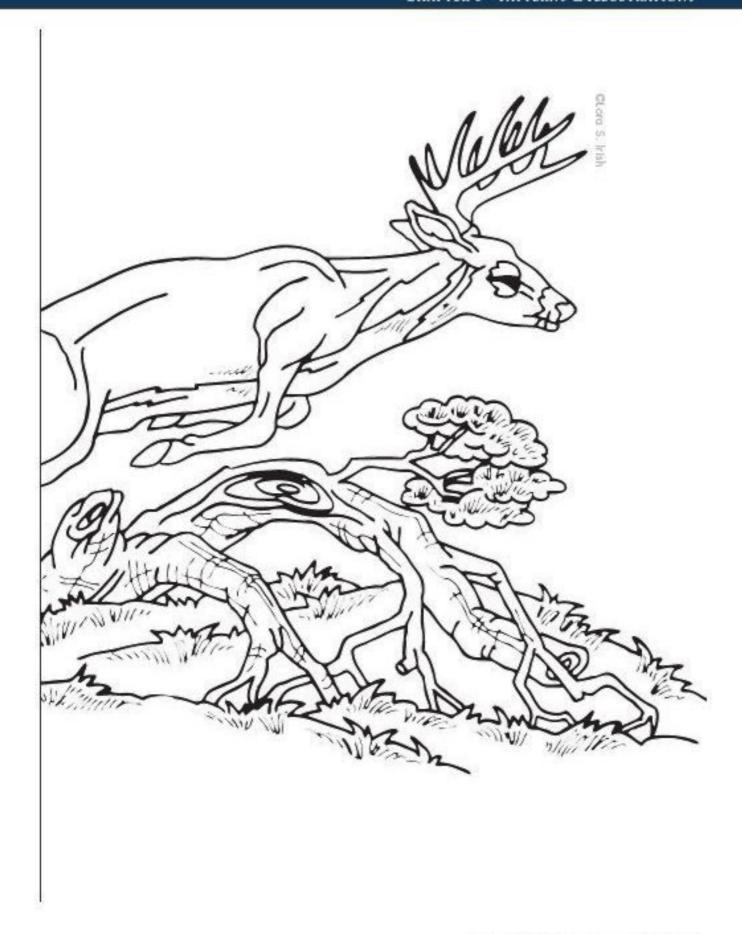








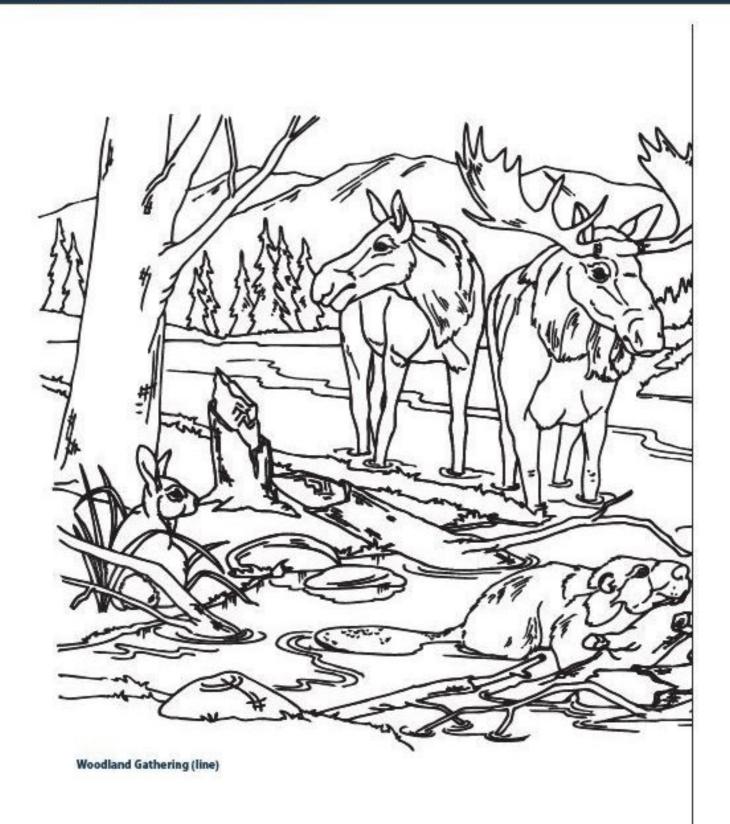




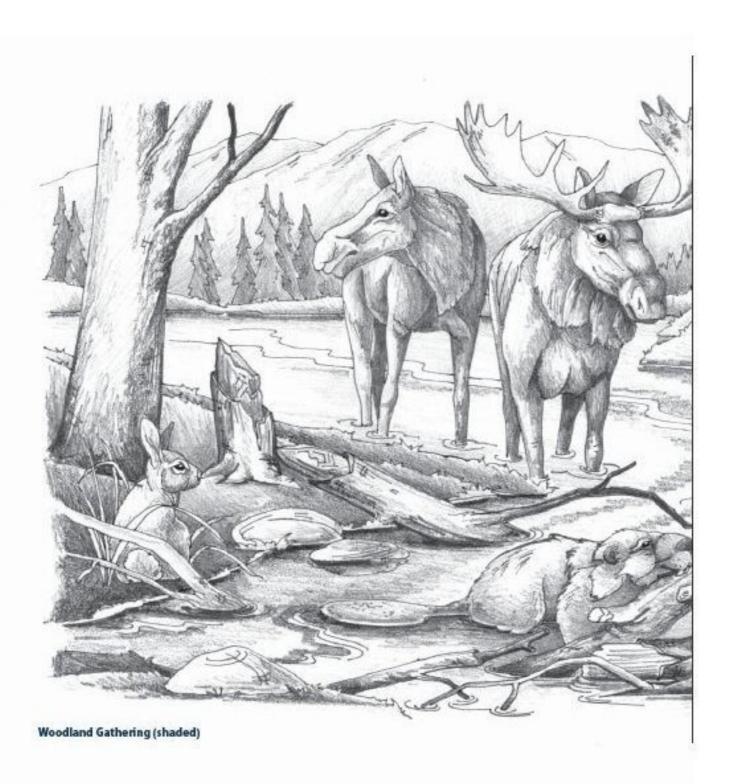


The Great Escape (shaded)











APPENDIX B WILDLIFE REFERENCE PHOTOS





Bald eagle Beaver





Bison

Big horn sheep

INDICES

GENERAL INDEX woodburning, 62-66 wood stain, 68-69 realistic relief carving, 31 adornments, 43 focus points, 15-16 relief carving styles. See advanced techniques advanced techniques, 29-35. See also forehead and horn sockets, 41 round gouges, 19 shadows, creating freeing element from background, 33-34 about: overview of, 29 fur and hair texture, 43-44 creating shadows, 32-35 sassafras wood, 17 high relief carving, 30 shadows, creating low relief carving, 30 freeing element from background and, 33-34 medium relief carving, 30 glossary, 170 gouges levels and layers, 32 realistic relief carving, 31 round, 19 multiple depth techniques, 35 relief carving styles, 30-32 spoon bit, 20 shadow box effect, 33 stylized relief carving, 32 V-point, 20 undercut stroke, 32 with woodburning, 63-64 sharpening stones, 22 basswood, 17 hair and fur texture, 43-44 skull and neck, 42-43 bench knives, 19 hogging out, 24 smoothing/rounding over, 25 brushes, cleaning, 21 Honduras-mahogany wood, 17 specialty tools, 20 butternut wood, 17 honing board, 22 spoon bit gouges, 20 horn sockets, 41 staining wood, 68-69 step-by-step tutorial, 50-59 carbon paper transfer, 18 stop cut, 23 carving tools, 19-22 stylized relief carving, 32 bench knives, 19 jawline, 39 jelutong wood, 17 chisels, 19, 20 cleaning tools, 21 techniques. See advanced techniques; cuts; compass, 20 layers, adding within levels, 14, 15 wildlife facial feature techniques depth gauge, 20 levels of patterns tools. See carving tools gouges, 19-20 adding layers within, 14, 15 transferring (tracing) patterns, 12-13, 18 honing board, 22 creating shadows, 32 measuring tools, 21 within scenes, 15 sharpening stones, 22 understanding, 14 undercut, 26-27, 32 specialty tools, 20 low relief carving, 30 veining tool, 20 cheeks, 39 veining tool, 20 chisels, 19, 20 measuring tools, 21 V-gauge lines, 25 cleaning tools, 21 medium relief carving, 30 V-gouges, 20 coloring wood. See finishing touches mouth area, 40 compass, 20 multiple depth techniques, 35 cuts. See also advanced techniques muzzle slope, 39 walnut wood, 17 hogging out, 24 wildlife facial feature techniques smoothing/rounding over, 25 about: overview of, 37 stop cut, 23 adornments, 43 nose, 40, 41 undercut, 26-27, 32 cheeks, 39 V-gouge lines, 25 ears, 41-42 obeche wood, 17 eye circles, 38 feathers, 45 Danish oil finish, 67-68, 70 forehead and horn sockets, 41 depth gauge, 20 painting wood. See dry brushing; staining fur and hair texture, 43-44 dogleg chisel, 19, 20 jawline, 39 dry brushing, 69-71 patterns mouth area, 40 about: overview of, 12; overview of muzzle slope, 39 illustrations and, 73 nose, 40, 41 ears, 41-42 adding layers within levels, 14, 15 skull and neck, 42-43 eye circles, 38 contour lines, 12-13 woodburning, 62-66

focus points of, 15-16

simplifying, 12-13

levels within scenes, 15

transferring, 12-13, 18

understanding levels of, 14

woods, 17

wood stain, 68-69

facial features. See wildlife facial feature

techniques

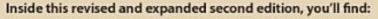
feathers, 45

finishing touches, 61-71 Danish oil finish, 67-68, 70 dry brushing, 69-71

LISTEN TO THE CALL OF THE WILD

Imagine the beauty of a deer running through the forest, a buffalo standing on a prairie at sunset, or a mallard drake winging through the cattails—all stunningly carved in wood less than two inches thick. This is the art of wildlife relief carving, where elegant portraits of animals and birds are brought to life with carving techniques that are easy to master and applicable to any type of woodcarving you choose to do.

Join renowned carver Lora S. Irish at her workbench as she shares a wealth of expert carving information to guide you through all of the steps that transform an original pattern into a realistic and superbly finished carving that can be proudly displayed in your home.



- · New patterns and a stunning gallery of wildlife reference photos
- Realistic patterns presented in both outline and pencil illustration
- · Instruction on selecting woods, tools, and finishes
- · Essential tips for mastering the basics of relief carving
- · Special techniques for creating facial features, fur, and feathers
- A comparison of relief carving styles, including low, high, stylized, and realistic

With 39 dramatic wildlife patterns to choose from, and an abundance of carving styles to explore, the variety of beautiful relief carvings you can create with this book is practically limitless.



Visit The Travellers Best @ http://www.thetravellerest.com



52495