# Chatham County 4-H Leatherworks Club

# The Basics of Tools

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First thing to know is that there are tons of tools that can be used in leather working, but not all are necessary. The purpose of this is help you understand our starting tools.

*IMPORTANT*: Never strike the tools with a metal hammer since it will damage the tool's striking surface.

There are three basic types of leather tooling/carving:

- Geometric stamping using a limited number of stamps (tools) to create a repeating pattern in the leather. Basketweave stamping using a basketweave stamp is one example.
- Floral carving uses a wider variety of tools to create images of flower, leaves and vines
- Figure carving uses a variety of tools to create images of animals and scenic images. Figure carvings uses many of the same tools used in floral carving plus a wide variety of specialty tools. Also many of the basic tools are modified for figure carving.

Leather tooling can be thought of as low relief sculpture. The leather starts as a flat surface and the tools are used to compress areas and add texture to the leather so that it has more of a 3-D appearance.

#### The Basic Seven

If your intent is to tool leather, especially floral carving/tooling, the basic seven represent the starting tools. The basic seven is composed of one of each tool; however, there are many styles and sizes of each tool. The different sizes come in handy when working on different sized

projects and can help make your work cleaner and quicker.

## Swivel Knife

The swivel knife may be the most important tool in your kit. It is used on every project, and used first and last in the carving process. The swivel knife is a tube ("barrel") with a knife blade at one end and a yoke at the other. The index finger is placed in the yoke and used to adjust the downward pressure on the knife. The "swivel" arises from a set of bearings around the shaft of the yoke that allows the barrel to be turned to create curves when cutting into leather. (There are styles of swivel



Photo 1: Swivel Knife

knives where these bearings are located on the knife shaft.) The blades can come in a variety of sizes and shapes.

"Stropping" the blade is used to ensure a smooth passage of the blade through the leather. When the blade is cutting, it accumulates small amounts of the fat and materials used to tan the leather. As this builds up, it increases resistance and you will start to feel "chatter" when cutting. Stropping involves passing the swivel knife blade along a piece of leather with a stropping compound on it to remove these materials from the blade. Proper technique is critical! The blade should be held to the strop (the leather with the compound) at the same angle as the cutting edge. This will mean your swivel knife will approximately form a 30 degree and with the strop. DO



Photo 2: Stropping

NOT roll the swivel knive into a vertical position when stropping. This could result in what is known as a perfectly dull blade.



Photo 3: Swivel Knife Cutting Technique

**Cutting Technique**: The proper grip for the swivel knife is to rest your index finger on the voke, and grasp the barrel with your thumb and middle finger. Practice turning the barrel with your thumb and middle finger. To use the swivel knife, the blade is pushed into the leather, then moved to follow the pattern lines. It is possible to push the swivel knife away from you, but it is much more common and easier to pull it towards you. When pulling the blade toward you, you will want to tilt the knife backwards so that only part of the blade in the leather. When doing this, however, make sure the knife remains in the plane perpendicular to the leather. By varying the pressue applied by your index finger, you can vary the depth of the swivel knife cuts. As a general rule, you want your cuts to be 1/3<sup>rd</sup> to ½ the thickness of the leather. When ending a line you will frequently want to feather it out by reducing the pressure and depth of the cut. While you can tilt the blade forward and backward to change the surface of the blade cutting the leather, do **not** tilt the knife side to side.

#### Beveler

The beveler is probably the second most used tool. They come in a variety of sizes and angles. The different sizes make it easier to fit and work in different areas of your carving. The beveler is used to define the edges of your design. Generally, you will

bevel on one side of your swivel knife cut to define your flower, leaft or vine. Occasionally you will bevel both sides of a line (referred to as double beveling).



Photo 5: Using the Beveler

The beveler will compress one side of the line so that the other side appears to stand up from the plane of the leather, thus giving the impression of a 3D image.

When using the beveler, the important thing is to maintain the tool perpendicular to the leather, i.e., don't lean the tool. Depth when beveling is controlled by the



Photo 4: Beveler

depth of the swivel knife cut and the force used when striking the top of the beveler. Since you are working along the swivel knife cuts, you will learn how to "walk the beveler" along the cut while hitting it. The movement is small, ensuring that there is overlap with the previously beveled section. The goal is to reduce the height without leaving marks from the sides of the beveler in the leather.



## • Pear Shader

The pear shader is used to shape and compress the interiors of flowers and leaves, leaving a bowl-like indentation. Again you want to keep the tool perpendicular to the leather and walk the pear shader to create longer indentations. Depth is controlled by how hard you strike the tool.



Photo 6: Pear Shader

Photo 7: Using the Pear Shader

# Camoflage

The camouflage tool is used to add texture and patterns to vines and other elements of your patterns. Once more you should keep the tool as vertical as possible when using it; however, there will the need to tilt it so that the points of the tool do not imprint on other

parts of the carving. In these cases, be sure to strike the head of the tool on it's flat and not on its edges.



Photo 8: Camoflage Tool



Photo 7: Using the Camoflage Tool

## Seeder

The seeder is used to stamp seeds into flower centers. These tools come in a variety of sizes, shapes and designs. As a general rule you will want to keep the tool perpendicular to the leather; however there may be times when you will need to lean the tool to get impressions into particular spaces. When doing this, be sure to take your time so you can get an accurate tool impression.



Photo 11: Using the Seeder



Photo 10: The Seeder





Veiner

Photo 13: Using the Veiner

The veiner is used to imprint the veins of leaves into the leather. They can also be used to create borders and other designs.

## Backgrounder

The space in a design that is not composed of flowers, leaves or vines, is called the design's background. In order to create as much depth in the design as possible, the backgrounds needs to be compressed. The backgrounder is



used to do this. When using the backgrounder, you want to ensure as smooth a surface as possible. This means using a consistent striking force and great care in moving the backgrounder as you work.



Photo 14: The Backgrounder

Photo 15: Using the Backgrounder

## Mallet/Maul

While not a formal member of the basic seven, a mallet or maul is necessary for tooling or stamping leather. As mentioned before, do not use a metal hammer to strike your tools. Due to this, mallets and mauls are made from wood, rawhide or high density plastic. A mallet looks like a hammer with two striking faces, while a maul is round.



Photo 16: The Mallet and Maul



# Stylus

The stylus is another non-member of the basic seven; however, it is needed to help trace your patterns onto the leather using tracing film.

Photo 17: The Stylus

## Basketweave Stamp

The basketweave stamp is one example of a geometric stamp. Using a straightline and the stamp itself you form patterns that look like a woven basket (surprise!). When using the stamp keep it perpendicular to the leather and take your time to make sure the stamp is accurately lined up to the line and the previous stamps.



Photo 18: The Basketweave Stamp



Photo 19: Using the Basketweave Stamp

# **Sheridan Style Variations**

"Sheridan Style tooling" refers to a style of floral leather carving that originated in and around Sheridan, Wyoming. It involves a number of characteristics including:

- Longer flowing lines for vines and stems -- these lines feather out when they come to an end;
- Leaves and flower centers have what are called the Sheridan ridge;
- Leaf edges tend to be scalloped with raised areas; (see the example pictures of the leaf)
- Background areas are smaller;
- Patterns tend to follow a flow of connecting circles with flowers in the center and use leaves to connect circles, minimizing vines;
- Patterns tend to be more compact.

To produce these characteristics, the basic tools have been adapted. For example,

- Bevelers have a steeper angle so they can work in the more compact patterns;
- Thumbprints are used rather than pear shaders. They serve the same purpose, but the thumbprints are longer than pear shaders so they can achieve the effects with a single mallet blow, rather than walking the tool as with a pear shader;
- Undercut bevelers are used to achieve the lift of flower and leaf edges;
- Leaf liners are an angled beveler with texture lines used to achieve the ridge in the center of flowers (see the effects on the example leaf photos);
- Flower center stamps are used more often along with a curved beveler for the ridge.

#### **Other Basic Tools**

*Modeling Spoon*: Comes in a variety of shapes and sizes. It is used to smooth out tooling irregulariets and ease depth transisitons in bevels.

Ruler/Straightedge: Measuring and drawing straight lines – 'nuf said.

**Wing Dividers**: A compass without of pencil. Used to mark consistent borders or consistent spacing.

*Hole Punches*: Come as a rotary punch which you squeeze to create a hole and has a round head with multiple punches sizes, or as a set of drive punches (different sizes) that you strike with a maul or mallet. If purchasing individual drive punches, important sizes are 1/8", 3/16", and possibly 1/16" for punching sewing holes.

Stitching Irons: Different sizes and different shapes for marking or making sewing holes.

Lacing Irons: Again different sizes and to some degree shapes for making slots for lacing.

**Rivet Setters**: Different types and sizes for setting different types and sizes of rivets. Starting point is a setter for medium sized rapid rivents.

**Snap Setters**: Two basic sizes (Line 20 and Line 24) for setting line snaps. There are a variety of snaps sizes and types that each require their own particular setter set-up.

If you decide you enjoy leather working, you will want to get your own set of tools to use at home. You may also want to get other tools outside the Basic Seven. The question is, where to get them?

If you want a set of the basic seven we use in the club meetings, you can purchase one of them from me.

There are a variety of options for purchasing tools, leather and other supplies:

- Tandy Leather can be found in Raleigh and online (www.tandyleather.com);
- Zack White Leather has a store in Ramseur, NC and online where you can buy tools and leather (www.zackwhite.com);
- Springfield Leather, located in Springfield, Missouri, is another source of tools and supplies. (www.springfieldleather.com);
- Weaver Leather Supply in Ohio is yet another source for tools, leather and supplies (www.weaverleathersupply.com);
- Makers Leather Supply in Waco Texas also has a wide variety of tools, leather and supplies (www.makersleathersupply.com);
- Tools can be found on Amazon, but these are often just reselling tools purchased from some of the above sources.
- You can also get into higher quality and custom tools, but at a significantly higher cost.