

{BASKET BOWLS}

Vessels Adorned With Traditional Basket Splits

Les Casteel



Streets of Morocco, 24" × 16" (61cm × 41cm), has full vertical splints, which accent its height.

I have been a woodturner for much of my life. Handles, baseball bats, rolling pins, nostepinnes, and chair legs were the projects spinning on my lathe. A few years ago, I learned to turn bowls and other wooden vessels. I soon realized the depth of a vessel was limited and the inevitable drying and seasonal moisture created problems.

By using the techniques of segmented woodturning, I discovered depth and drying were not a major issue, so I learned to cut and glue segments, flatten rings, and turn bowls and vessels from the bottom up. Everything, it seemed, relied on the wood to make an artistic statement, especially the feature ring on segmented vessels.

During one average day at the lathe, as I was applying an oil finish on a white oak segmented vessel, a stream of early morning sunshine shot across the lathe. I rested the bowl on the toolrest and thought how much this vessel, with its oak segments, looked like a white oak basket. From this simple observation, an idea developed: Why not incorporate basket splits—thin strips of wood—into, onto, or woven around the turning as embellishment? With that, the basket-bowl idea was born.

Gathering ideas

As I became more convinced the basket bowl was a good idea, I searched for inspiration. I've lived most of my life in and around areas with long traditions of basket making and have watched craftsman in Arkansas and in Missouri cut basket *splits* or *splints*. The word *split* is more traditional because these strips of wood were literally split by using sharp froes and knives. Later, they were cut from green, white oak boards using a special type of handmade spokeshave. With great skill, basket makers weave these splits into traditional white oak baskets made famous in the Ozarks.

First, I looked at the creations of local traditional Ozark white oak basket

Squash Pot, 16" x 16" (41cm x 41cm), has splits that are shorter than the entire length of the vessel.

makers, such as those woven by the Owens and Gibson families. These high-quality baskets tend to be white oak, and usually come in simple shapes: square, oval, or round. Each one becomes unique however, when some little detail is added, such as a bit of color or an extra split woven into the handle.

I exhibit turnings and furniture each year at Silver Dollar City's National Harvest Festival near Branson, Missouri. The festival provides the opportunity for me to visit with and closely observe the work of several basket artists, many of whom continue to weave the quintessential basic basket.

Today's baskets

Contemporary augmentation of the basic basket includes colorful dyed splits or extra weaving, in addition to adding other materials such as leather, metal, bone, or deer antlers. Baskets are not limited to white oak construction—among other materials they can be made from pine needles, which can be woven into virtually any kind of object from vessel to sculpture. Pine-needle weaving often utilizes brightly colored patterns

similar to those seen in the feature rings of segmented vessels.

I also studied the unique baskets of Leon Niehues, who has crossed the line of functionality into pure form. His baskets use a basic internal shape with skillfully and gracefully woven outside enhancements using thin basket split materials.

Studying traditional and contemporary baskets helped me focus on where I wanted to go with the bowl-basket.

My basic method is to turn a wooden vessel, then continue with adding basket splits. The goal is to create a harmonious union between turned vessel and technique, culminating in a balance of form and function.

Balancing form and function

I have been lucky to have known and learned from two genius woodworkers: Sam Maloof and David Ellsworth. ▶



1 A convex (outward) curve often needs attachments at both ends of the shape. The split will fit closely to the vessel.



2 A concave (inward) curve will need an attachment at one end of the splint. If you want the splint to fit closely to the vessel, make an attachment point near the deepest part of the inward curve.



3 Decide on the width of your splint, then plane the board to that thickness. Use a clear piece of wood to avoid problems when bending.



4 Set up the bandsaw with a sharp blade and a fence. The goal is consistent splints between 1/32" and 1/16" (.08mm and 1.6mm) thick.



5 Inserting a split into the pocket holds the split securely and hides the ends for a neat, clean installation.



6 To cut the pocket, insert the parting tool into the vessel at the same angle you worked out on your model. Work slowly and measure the depth often.

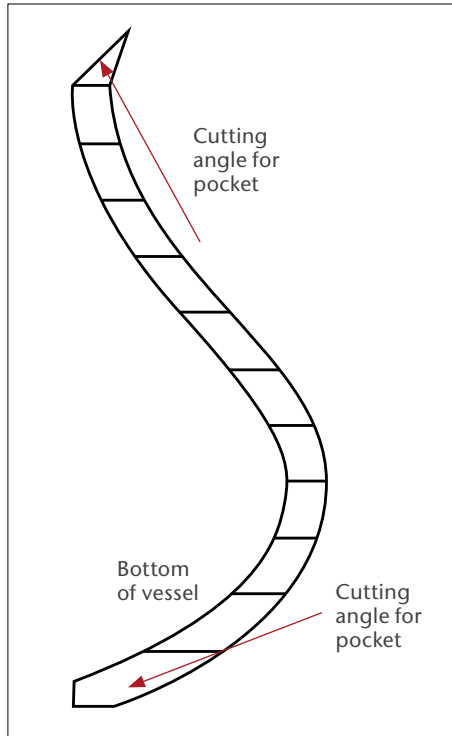


Figure 1. Model for Cutting Pockets Sketch out your model by taking measurements of the walls, and then plan your angle and location for the pockets.

From Sam, I learned to build rocking chairs. He taught the importance of balancing form and function in furniture. Form is the shape—the artistic, pleasing value of a piece. Function is its utility.

David stressed the importance of turning a pleasing shape. Form is first defined by a vessel's shape. After observing the shape, we see other aspects including color, grain patterns, texture, and piercings. So, both shape and augmentation of a woodturning can define its form.

When I design a basket bowl, I first consider its basic shape, asking a series of questions: Will the shape I have in mind support this type of augmentation? After splits are applied, what shape will show through? What part of the shape will be covered? Will the unadorned part distract from the addition of splits? Should the vessel be tall or short? I will search through my library of woodturning books and pictures and sometimes

surf Internet to look at pictures of ceramic vessels.

Design considerations

With a basic shape in mind, I decide the orientation of the splits: vertical (*Streets of Morocco*), horizontal, or both? Will verticals run the length of the vessel or only part of the way (*Squash Pot*)? How many splits will there be—eight vertical splits and five horizontal or twice that many?

The design considerations are limitless: Will the splits be woven into each other? Will they be straight or will they curve or perhaps, spiral up the vessel? What type of wood should be used and will they be stained or dyed?

Vertical splits tend to elongate the vessel's look whereas horizontal splits tend to fatten the vessel. Will splits cross over each other or never touch? Will the ends of the split show or will they be hidden? If the ends are to be hidden I will need to consider turning pockets or slots in the vessel—more on pockets later.

Let's take a look at white oak baskets: They are often square and have 90-degree corners. From my experience, the corner is the most difficult part to weave and is the first part of the basket to fail. You probably will not have 90-degree corners on a woodturning, but the lesson is to avoid tight turns and curves in a basket-bowl design.

I have also found it is easier to wrap and form a basket split around a convex (bulges out) curve than a concave (bulges inward) curve. A convex curve often needs attachments at both ends of the shape (*Photo 1*). A concave curve will need an attachment at one end, and sometimes an attachment near the deepest part of the inward curve (*Photo 2*). The idea is to think about how you will attach the splits. Make sketches or have three-dimensional examples to help answer these questions.

After you have come up with a design for the splits, ask yourself: *Does this design mean I might have to redesign the shape of the vessel?*

Vessel construction and color

With the vessel's shape and a basic design for splits decided, I consider vessel construction: Should I use segments, a hollowed solid, or a combination? How thick do the walls need to be to facilitate attachment of splits?

Color considerations are complex. The vessel could be any natural wood color and with the use of aniline dyes, virtually any color. The shade could be as light as bleached maple or as dark as India ink. Using segmentation introduces additional patterns and geometric shapes. The time to decide on combinations is before construction. Make drawings.

Obtaining basket splits

Splits can be cut or purchased from outside sources. If purchased, choices will be limited to what mainstream



7 When installing a collar, simply overlap the split about an inch, making a band. Apply wood glue to the first $\frac{3}{4}$ " (19mm) and clamp it with a small clamp.



8 Collars add a neat appearance to the splints. Leave the collars loose so they can expand and contract with the vessel.

basket makers are using, mainly white oak, black locust, or some type of flat river reed. If you make splits yourself, the choices are almost unlimited.

Almost any good grade of hardwood can be used. I have successfully used oak, maple, walnut, cherry, and a few exotics. Use straight-grained wood—wild grain often splits when bending. Traditional basket makers used pocketknives, hand planes, or modified spokeshaves to cut splits and always cut splits from green wood for the same reason woodturners like to turn green wood—it is faster and easier than using dried wood.

I cut my splits with a bandsaw from dry planed boards. I use clear, straight-grained boards that are free of defects. I plane the board to a thickness equal to the width of the split I want—for splits $\frac{1}{2}$ " (13mm) wide, I will plane the board to $\frac{1}{2}$ " thick. The length of the board should be

about 1" longer than the length of the split you will need (*Photo 3*).

I set up my bandsaw with a sharp $\frac{1}{2}$ " blade and a fence (*Photo 4*) so that I can saw off splits that are between $\frac{1}{32}$ " (1mm) and $\frac{1}{16}$ " (2mm) thick. I test the strip by installing and holding it onto the vessel. If it splits or breaks, then go thinner or narrower. If it bends easily, you can go a bit thicker.

After you have cut the split, it can be sanded lightly. Sanding is easiest by simply folding over a piece of sandpaper and pulling the split between it several times while applying pressure with your fingers. I often leave some bandsaw marks because they give the

split a nice texture, which I like. You could also embellish the splits with carving, piercing, burning, or coloring.

Once the splits are cut, trim to the required lengths—a pair of heavy scissors works well. If the ends of the splits will show, shape them into a pleasing contour. After trimming the splits to length, dye, stain, or finish them before the application. I suggest you cut a few extra in case one fails during installation.

Pockets—attaching splits to the vessel

There are a number of ways to attach the splits to the vessel. I have used screws, thread, collars, glue, and string. I have experimented with metal rivets, rope, wire, dowels, and leather. Attachment methods are endless, limited only by imagination. I will focus on a few techniques: first, cutting pockets or slots to hold and hide the ends of the splits, then screws and thread.

Before you remove the vessel from the lathe, think about the design. If vertical splits are planed, and the ends ►



Walnut Blood Brother, 2012, Walnut, maple, 15 × 16 (38cm × 41cm)

My concept was to have two vessels where maple and walnut exchanged roles.

Maple Blood Brother, 2012, Maple, walnut, 15 × 16 (38cm × 41cm)

are to be hidden, cut pockets before the vessel leaves the lathe. A pocket is a slot cut with a thin parting tool. Inserting a split into the pocket means the split is held securely and the ends are hidden for a neat, clean installation (*Photo 5*).

I use a thin ($\frac{1}{16}$ ") parting tool that resembles a heavy butcher knife. To cut the pocket, first decide where to attach the split. At that point, the thickness of the vessel walls and the angle of the cut determine depth of the cut. I measure the thickness of the walls, and then draw a model on paper. (A variety of software can also create a model.) A model can be as simple as two parallel lines, with the distance between the lines equal to the thickness of the vessel wall. I lay the parting tool on the model and tilt the parting tool to the approximate angle at which I wish to cut the pocket, allowing me to see if the pocket can be cut at the location and angle I want. I aim for a pocket depth of at least $\frac{3}{16}$ " (5mm) (*Figure 1*).

If the pocket is near the bottom or top, as it often is, you will need to know the thickness of the bottom or top. The technique is the same except add a line representing the thickness of the bottom or top to your model. Often the bottom is a bit thicker near the edge of the vessel so I can cut a bit deeper for the pocket.

I want my segmented vessels to feel heavy, like pottery, so I turn the walls between $\frac{1}{4}$ " (6mm) and $\frac{1}{2}$ " (13mm) thick. The bottoms are usually about $\frac{7}{8}$ " (22mm) thick, allowing for a deep pocket. To cut the pocket, insert the parting tool into the vessel at the same angle worked out on the model (*Photo 6*). Work slowly and clean out shavings often. *Be careful to not cut through the vessel's wall.*

Once the pocket is established, insert a tiny screw through the split and into the wall of the vessel. Brass, steel, black anodized, or copper screws with various head configurations can be found online in sizes #1 thru #4 in

and in lengths as short as $\frac{1}{8}$ " (3mm). Drill the holes through the split into the wall of the vessel. I use an old-fashioned hand-crank drill and drill slowly and carefully to avoid going through the vessel wall. With the hole drilled, it is just a matter of turning in the screw.

Other methods

Another way of attachment is drilling two holes through the split and into the wall of the vessel. You can use silk thread, fishing line, or thin wire to secure the split near the pocket or anywhere else along the vessel. Use a large sewing or embroidery needle to pull the line through the holes. Using this technique, you can make the split bulge out or form-fit closely with the lines of the vessel.

With all of the vertical splits established you could now weave horizontal splits in and out of the verticals. These can continue all or part way around the vessel at any location. Splits can be weaved horizontally, or at angles. If the weaving gets tough or your splits are a bit thick, soak the splits in warm water for an hour or so to make them more pliable—a technique many basket makers use. Soaking, however, can raise the grain, so you might have to sand again.

If you need to attach the horizontals to the verticals where they intersect, tiny holes can be drilled through the splits at the intersection. Then use a screw, thread, string, rivet, or wire to hold them together. If you wish to only use horizontal splits, they can be overlapped slightly and attached in a variety of ways. Play with the splits and you will discover all sorts of ideas and methods.

If you want to hide the screws holding the ends of the verticals, make a collar. Wrap a split around the vessel along the line of the screws. Overlap the split about 1", creating a band, and then apply wood glue to the first $\frac{3}{4}$ " (19mm) and clamp it with a small clamp, rubber band, paper clip or blue painter's tape (*Photo 7*). When dry, the collar rests over the screw heads and adds a bit of depth

to the splits. I leave the collars loose so they can withstand any expansion/contraction of the vessel (*Photo 8*).

Finishing

The process I follow is to create a segmented vessel and cut any pockets for the verticals according to my split design. I then apply Waterlox and let it cure. After curing, I make and cut the splits to length and install them. I usually paint Waterlox onto the splits on the outside only. The coated splits are a bit dull and contrast with the finish of the vessel.

These techniques can also be applied to green-turned hollow vessels, but the wood must be dry and finished before applying the splits and finishing.

Once during a show and tell at the Northeast Oklahoma Woodturners Club in Tulsa, the accomplished woodturner Ron Fleming said something that has stuck with me. As he held up a particularly nice piece he had turned, he grinned and said, "Oh, I was just playing around and I came up with this." My advice is to play around with these techniques and I am sure you will create something to be proud of! ■

Les Casteel is a full-time rocking chair builder and woodturner from Harrison, Arkansas. He has been woodturning since he was a youngster and has shown and sold work nationally. He is a member of the Woodturners of Southwest Missouri. Les can be contacted at les@woodthatrocks.com or woodthatrocks.com or [facebook.com/woodthatrocks](https://www.facebook.com/woodthatrocks).

Sources

Many examples of augmented baskets on the Internet will help inspire and inform. Search for images of *black ash baskets, white oak baskets, pine needle baskets, or pine needle weaving*. To find sources for basket splits, search for *basket splits* or *basket supplies and suppliers*. For inspiration and to study high-quality basket making, visit owensoak-baskets.com, gibsonbaskets.com, loeberlook.com, leonnihues.com, basketmakers.org.