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PotteryMaking Illustrated

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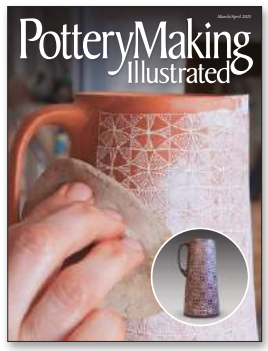
Welcome to your workshop! Whether you enjoy throwing, handbuilding, surface design, glaze testing, or all of the above, we've pulled together several things for you to try out once you get back to your studio.

If you're familiar with *Pottery Making Illustrated* and *Ceramics Monthly*, then you already know they're packed with practical information, projects, and techniques. The articles shared here provide a sampling of some of the great content in each issue.

You'll also find a wealth of information on the magazines' websites: www.ceramicsmonthly.org and www.potterymaking.org. Guests can access their choice of articles for free on a limited monthly basis. For more tips and techniques, check out hundreds of free posts and scores of how-to videos on the Ceramic Arts Network (https://ceramicartsnetwork.org). Enjoy your workshop!



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Cover (clockwise from top left): Shawna Pincus transferring a graphic design onto a curved, bisqueware pot. Maya Rumsey brushing on layers of surface decoration. Galen Sedberry throwing a foot ring on to the bottom of a slab-built plate. Christina Orthwein creates homemade tools with flexible silicone tips. Angelo di Petta unmolds a slip-cast cup.

"To say I am happy with my VPM20 would be an understatement. These are sweet machines, very easy to use and clean, I only wish I'd had one earlier in my career" — Mary Fox Pottery

For more on Mary Fox, The Legacy Project and her upcoming book, *My Life as a Potter: Stories and Techniques,* visit www.maryfoxpottery.ca

Efficient and Effective SLAB PLATES

by Galen Sedberry

As a second-generation potter and the son of a prolific plate maker, I grew up in a household that used exclusively handmade dinnerware at meal times. After becoming a maker myself, I wanted to continue and propel that celebration of daily ritual with others.

I set out making slab-plate forms about four years ago in response to the question: How do I produce a consistent form in the most efficient manner both in construction and firing? Typically, thrown plates require the cutting of a foot ring—producing a burdensome amount of scrap clay that then needs to be recycled. Plates can also require a less-than-efficient use of stacking space within a kiln, potentially becoming a limiting factor when considering the finishing process of work. I have found the following method of plate making and firing to offer one solution to these hurdles.

Rolling the Slab

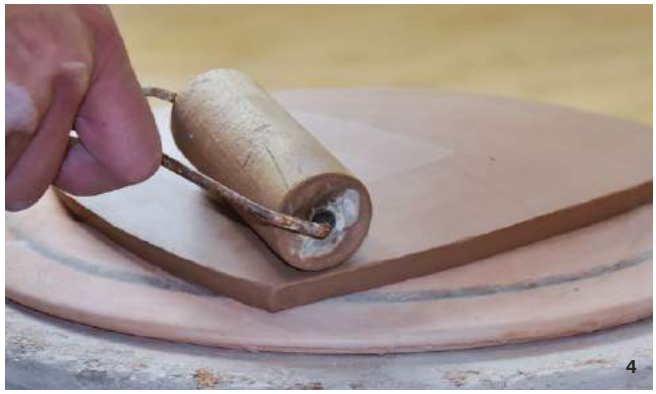
Start by rolling out a slab to approximately ½ inch in thickness using a slab roller. This can also be accomplished with a rolling pin and two dowels of equal thickness. I usually roll slabs large enough to make four or five plates at a time. Using a rubber rib, thoroughly compress one side of the slab before flipping it over and compressing the other side (1). Compressing the slab ensures a smooth surface as well as strengthening the clay in order to

Grass plate, 7½ in. (19 cm) in diameter, handbuilt North Carolina stoneware, wood fired to cone 10, 2022.

Roll a slab to approximately ½ inch thick. Compress both sides of the slab using a soft rubber rib.

Using a thick-gauge paper template, cut out the basic plate shape from the slab.

Transfer the slab to a hump mold, making sure the shape is centered on the mold.



Gently compress the slab with a wooden roller to the curve of the mold.

Score the back of the slab in the approximate area where the foot ring will be attached.

Drape a coil over the scored area, then cut off any excess length on a bevel. Score the ends and blend to make a continuous loop.

prevent drying and stress cracks later on. Using a thick-gauge paper template, cut out the basic triangular plate shape from the slab (2). Make sure to remove all the scrap pieces of slab from between and around the cut plate shapes, wedge, and then wrap them in plastic to be used later in the process.

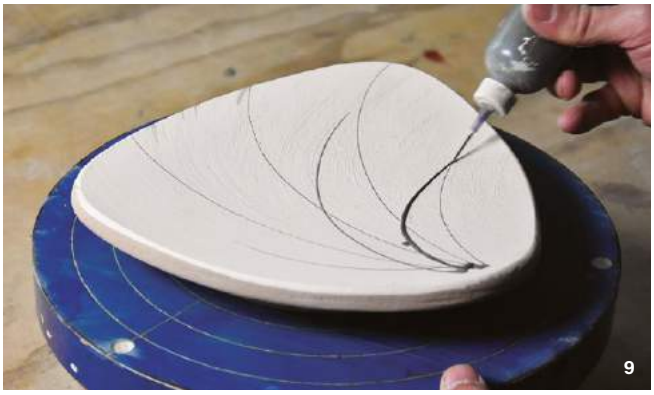
Transferring to the Bisques Mold

I like to leave the slab shapes out to dry for at least a few hours to stiffen slightly before transferring to the mold, allowing for a workability that is less prone to denting and ripping while handling. The hump molds I use can be handmade simply by throwing a large plate form with the interior curve or throwing a large dish and then trimming the same curve on the back side in lieu of a foot ring. Once you have an original shape you are happy with, multiples can be made from it once bisque fired.

Using concentric rings that have been applied to the bisque mold with a marker, center the triangle shape on the mold by making sure the tips of the triangle overlap the ring evenly on all

Using a light amount of water, blend the clay of the foot ring into the slab.

With a metal rasp, do a final shaping of the form. Soften hard edges using a soft rubber rib.



Starting in one corner, slip trail the stems of the grass pattern in a fan shape across the plate.

Use quick and decisive brush strokes to create the leaves of the grass pattern.

Pour an ash glaze over the face of the plate using a ladle.

To fire, stack the plates (foot ring to foot ring) on top of a three-point trivet with wadding and shells. *All process photos: Jan Cavanaugh.*

three sides (3). Using a handheld wooden roller, gently push the clay down toward the bisque mold (4) in order to generate a little bit of clay memory, which will prevent the plate from flattening and twisting while drying.

Throwing the Foot Ring

Using a grip for your wheel head, or using the tap-to-center method and clay lugs, center and secure the mold to the wheel. Next, wedge the clay from the slab scrap, then extrude or roll out a coil to approximately 18 inches in length. Prior to placing the coil onto the slab, use a serrated rib to score an approximate ring on the back side of the plate (5). Scoring this ring helps both to center the foot ring on the back of the plate, as well as making a secure connection between coil and slab. Loop the coil on top of the slab and cut off the excess on a steep-angled bevel (6). Make sure to cut the bevel in the same direction as the spin of the wheel head, ensuring your fingers are compressing the attachment point during throwing. Using a sponge and a light amount of water, gently compress and

Top left and right: Grass plates, 7½ in. (19 cm) in diameter each, handbuilt North Carolina stoneware, wood fired to cone 10, 2021–22. **Above left and right:** Wine cups, 3½ in. (9 cm) in height, wheel-thrown North Carolina stoneware, wood fired to cone 10, 2022.

center the coil before using the tip of your finger to move a small roll of clay down both sides in order to blend the foot ring into the slab (7). Then, make sure to round off the top of the foot ring in order to prevent any sharp edges. Wait until the plate is a soft leather-hard consistency before removing it from the mold and placing the foot ring down on a table to equalize for a day.

Final Shaping

Once the plate (including the foot ring) is leather hard, place it on a banding wheel and shape it using a metal rasp (8). Round off the points of the triangular shape and take off any sharp edges around the sides. As I see these plates as true daily-use pots, removing any sharp edges reduces the risk of chipping over time. Finally, use a soft rubber rib to do a final shaping and softening of edges, and to remove any marks left by the metal rasp.

Slip Trailing and Brushwork

I use a black-stained porcelain slip to do all of my trailing and brushwork. I start by trailing the lines of the grass pattern in one corner, moving across the plate in a fan shape and accentuating the triangular form itself (9). I find that working on off-round pots lends itself well to this kind of decoration, as there are clear starting and stopping points found in corners.

I use the same slip with a brush to produce the leaves of the grass pattern. Moving from the same starting corner as the trailed lines, I begin with the larger leaves and work my way up the plate, finishing with the smaller ones (10). I find the key with trailing lines and making marks with a brush is simply to be deft and deliberate with your movement and to let your hands do the work, or simply put: Be confident.

Glazing and Firing

I am looking for a truly variegated surface on my work, and I employ several techniques to produce it. The rice-hull ash glaze I use is formulated to move slightly during the firing and is applied by pouring using a metal ladle (11). Pots are glazed after the bisque firing. Pouring the glaze allows me to get an intentional, uneven distribution of glaze on the surface of the pot, resulting in areas of clearly defined imagery and areas that are more abstract.

The ability to finish a substantial amount of plates in a single firing seems to be a limiting factor for a lot of potters, as plates generally take up a lot of stacking space. To resolve this problem, I fire two plates stacked together, foot ring to foot ring, on top of a three-point trivet with wadding and shells (12). Firing the plates in this way not only allows me a more efficient means of firing a larger quantity, but also puts half the plates in a position where the glaze can move to the outside edge, producing surfaces that appear to flow upward and outward. **Note:** For extended wood firings and soda firings, consider wadding between the foot rings.

My work gets fired to cone 10 in a single-chamber, sprung-arch kiln with an external firebox for approximately 18 hours.

Galen Sedberry is a second-generation studio potter living in western North Carolina. To see more, check out @galensedberry on Instagram, or visit www.sedberrypottery.com.

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Transferring Images

by Shawna Pincus

Surface design techniques are endless, but often favor application on flat planes or greenware. Here's a process suitable for bisque-fired pots that yields graphic imagery.

Combining ceramics and printmaking can be a wonderful way to add depth and interest to the ceramic surface, but there are challenges to printing on fully formed vessels. While investigating ways to transfer images to clay, I found that I could silk screen onto a Gelli printing plate, and then transfer the print directly onto bisqueware. A Gelli printing plate is a soft, translucent, flexible material, normally used to transfer paint to paper, but can be used to transfer underglaze to ceramic surfaces. Since the plates are flexible, they can print a crisp, detailed image along the curvature of a pot. The translucency of the plate is perfect for positioning the underglaze print accurately, and since underglaze dries quickly, there is no wait time after transferring the print, allowing for limitless possibilities for layering of images and colors.

Preparing to Print

Gelli printing plates are readily available at local craft stores, or online. They come in a variety of sizes, so find the size that works best for you and your work. I tend to use smaller 4-inch circles to print on small items, 5-inch squares for singular or vignetted images, and an 8×10-inch rectangle for larger, continuous designs (see 1). Creating a screen with artwork is its own process. There are many screen-printing kits you can buy through a variety of online and physical stores (see the Resources list at the end of this article). Screens are pretty simple to expose, easy to store, and fairly inexpensive.

Since traditional printmaking ink won't stand up to the kiln's temperatures, a ceramic pigment must be used. Commercial underglazes come in a variety of colors and work well with the screens. Underglazes will need to be thickened before using them with this process. This can be achieved by simply leaving the jar lid open for a few days, and stirring occasionally, until a sour cream–like consistency is reached. I find that different brands of underglaze, and even different colors within the same brand, need to be slightly different consistencies in order to print properly, so some experimentation is needed.

Method

To give a little extra cushion before printing, place the Gelli printing plate onto a sheet of thin craft foam. Lay a screen face up on the printing plate, keeping in mind that your image will be transferred in reverse (make sure to consider this when designing your image, especially if you are incorporating text). Apply a small amount of thickened underglaze to a squeegee or flat rubber rib (2), then, holding the screen with one hand, drag the squeegee across the screen at a 45° angle, making sure to evenly distribute the underglaze over your image (3). Lift the squeegee and drag it across the image again, angling the squeegee up a bit more to collect the excess underglaze. You may need to repeat these steps to completely cover the image with an even layer of underglaze.

Lift the screen from the Gelli printing plate (4). Working quickly so the underglaze doesn't dry out, gently roll your pottery over the image on the printing plate (5). The dry ceramic surface will absorb the underglaze, immediately transferring the print from the printing plate to your clay (6). To print on a flat surface

1


2

1 Materials for printing from left to right: 8×10 in. Gelli plate, yellow squeegee, Amaco Velvet Velour Black underglaze, silkscreen with hand-drawn berry illustration. **2** Place the silkscreen onto the Gelli plate and apply the thickened underglaze.

3 Use the squeegee to spread the underglaze over the image, making sure to apply the color evenly. **4** Gently peel away the silkscreen to reveal the image remaining on the Gelli plate. **5** Using gentle pressure, roll the pot over the print. **6** The image transfers from the Gelli plate to the pot and is ready for further decoration.

or interior, pick the printing plate up and gently press it onto the surface of your piece. Once you have completed a print, clean up the Gelli printing plate with a damp sponge, dry it off, and repeat the process. The screen can also be cleaned with a damp sponge; however, there is no need to clean it between prints unless the underglaze starts to dry and clog the screen.

Troubleshooting

Many Gelli printing plates come with a thin film on them, which can repel water, making it difficult for the underglaze to stick to a new plate. To counteract this, add a light dusting of cornstarch before printing to break in the plate. If your underglaze continues to bead up, you may need to adjust the consistency of the underglaze.

Finding the right underglaze consistency is important. If your image isn't showing through, and you have made your screen correctly, then the underglaze ink is likely too thick. Add small amounts of water incrementally until you get a good print. If the image is beading up on the plate, the underglaze is too thin and will need to thicken more.

Although it can take some trial and error to find a comfort zone with this process, the ability to merge ceramic forms with imagery opens up endless possibilities.

Resources:

Gelli Printing Plates
- www.gelliarts.com

Silkscreens
- www.ezscreenprint.com
- www.maycocolors.com/creative-tools/designer-silkscreens
- www.speedballart.com/speed-screens

Shawna Pincus is a ceramic artist living in Baltimore, Maryland, with her husband, daughter, and their very fluffy cat. She grew up near Philadelphia, Pennsylvania, and attended the Maryland Institute College of Art in Baltimore, Maryland. She currently works full time in her studio in addition to teaching pottery classes at Baltimore Clayworks as well as through various online workshops. You can find more information on her process and artwork at www.pinkkisspottery.com or @pinkkisspottery on Instagram.

From Firm to Fantastic

by Anne B. Crabbe

About a year after my retirement in 2008, I enrolled in a one-day-a-week Introduction to Pottery class at nearby Montgomery Community College in Troy, North Carolina. The school has a very impressive setup and is reputed to have trained many of the potters who live and work in the pottery-rich Seagrove, North Carolina, area. I quickly realized that I was the only beginning student in the 18-student class, which meant that, in addition to the instructor, I had 17 other teachers. That was 12½ years ago. Many of the students, like me, have been enrolled in the "introductory" class ever since, and we continue to learn from and support one another—in pottery and in life.

Within 18 months after walking into that first class, I was able to add a 25×12-foot studio to my home. Having made that great financial investment and being half Scottish, I knew the new studio had to be more than just a playroom. Consequently, I became a pottery junkie, spending time almost every day in my pottery haven.

As I continued to grow and improve, I learned that I could save considerable money by buying clay in bulk, so I started buying my clay in 500-pound purchases—the amount at which there was a price break. Time progressed, and so did I. A few years ago, I discovered that the next price break came at 2000 pounds. Egads! A ton. Who could possibly use a whole ton of clay before it dried out? Still, the savings was considerable, and by then, I was using mostly porcelain, which is pretty darn pricey. So, I bit the bullet and ordered 2000 pounds of porcelain.

Fortunately, there was plenty of room in the garage to store the clay. Since the garage is attached to the house, there was no fear of freezing. However, I have to admit that by the time I got to the last few hundred pounds of clay, it was getting mighty firm, and though I am pretty strong, it was a major challenge to throw with it—as in, impossible.

A potter friend advised me to add half a cup of water to the bag of clay, seal it tightly, and soak it in a large bucket of water for 24 hours. Sounded like a plan. Except, the result was 25 pounds of mushy porcelain, which had to be dried on a large plaster slab. Definitely more malleable, but what a mess.

Next, I tried a technique advised by another potter friend. This time I used a chopstick to poke holes in the clay, added a little water and wet towels, wrapped it up in plastic, and waited. The result was pretty decent: a nice soft, wedgeable clay. But when I began throwing, I discovered that even though the clay had been wedged extensively, it still contained air pockets. I tried another few approaches, then came up with one that has worked for me. So far.

The Slice-and-Fold Method

First, I soak several small bathroom or kitchen towels in water, then wring them fairly dry. One is folded in half and laid on the table. On top of the end of the damp towel, I place a slice of clay (about one inch thick) from the 25-pound block, and then fold the towel over it. Another slice of clay is added, with towels wrapping each slice until the block of clay is all sliced and wrapped in towels (1).

To reclaim dry clay, soak several towels in water, wring them fairly dry, then fold them around 1-inch slices of clay. Wrap the entire set in plastic and allow it sit for a day or two.

The block of sandwiched clay is wrapped well in a plastic bag and allowed to rest for a day or two.

When the bag is opened, it is like a miracle. The clay is moist, but very workable. Since I like to use a softer clay, it is perfect for me. Though I try to do a thorough job of wedging, there are still a few air bubbles, but nothing like the chopstick method.

Though I have only used this method with porcelain, I imagine it would work for every type of clay that has become too firm to throw with ease. If it gets too wet, try wringing your towels out more, so they are only moist, not wet. A longer wait will also result in a drier clay. If that doesn't work, try buying some chopsticks.

Anne B. Crabbe earned degrees from the Universities of Wisconsin, Iowa, and Nebraska, before spending 42 years in education as a teacher, instructor, and administrator. She lives with her two Siamese cats (ChoiChoi and Sipsong) and two rescue dogs (Winston and Dickens) in Pinehurst, North Carolina.

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Silicone-Tipped Tools

by Christina Orthwein

Do you need a flexible tool to smooth and compress seams that are a little too large for conventional rubber-tipped tools? Making your own silicone-tipped tool may be the answer.

I have often wished to have a soft, round rubber tool on the end of a stick for pressing coils into the inner seams of my slab vessels or for smoothing hard to reach parts of a sculpture. There are many rubber shaper tools on the market, but they are too pointy and small for my needs. I wanted something more the size and shape of my thumb, but with a longer reach. So, I decided to make my own.

I happened to have just the thing in my studio—a two-part silicone putty for mold making. (It can be purchased at most art stores or online at retailers like Blick or Amazon.) This putty is very easy to work with and will keep its shape but remain soft after it cures. A little goes a long way, so there is no need to buy a large box.

My first attempt was to form a rounded silicone nub over the bristles of an old paintbrush, which worked well, but the silicone didn't adhere to the brush at all, and it pulled right off the end. It works better to shape the silicone around something with a protruding edge that it can grip around and hold tight. Some examples of items found around my studio that worked well for the stick base: a really long screw, an eye hook screwed into the end of a wooden dowel, a screw drilled halfway into the end of a pencil, a broken loop tool, and the eraser end of a mechanical pencil (1).

A Few Simple Steps

Begin by measuring the ingredients. The silicone will come with directions. The kit I used works by scooping out and hand mixing equal parts of the two colors of putty. I found that a half teaspoon of each was plenty to make the size of tools I wanted.

Next, squish and blend the two putties together with your fingers until they are well mixed, maybe 15 seconds or so (2). It will be oily and have a soft, plastic feel. Roll the mixture into a nice smooth ball in your palms (3). Then, attach the ball to the stick or handle. Press your stick into the rolled ball and squeeze the putty around the screw end to give it a nice tight grip (4).

Finally, form the tip of the silicone to the desired tool shape (5). If you want a sharp angle, you can press it onto a smooth work surface or cut it with a razor blade. Finish with gentle finger taps to smooth and perfect the edges.

It takes just a few minutes for the putty set up enough to hold the shape, and about 30 minutes to be ready to use (6).

Tips

- The thinner you make the silicone tip, the more flexible it will be.
- The silicone sets up after just a few minutes, so work quickly and only mix up enough to make one tool at a time.
- Rest the tool vertically while the silicone sets, with the ball end up in the air to keep it from touching anything that might distort the shape while it sets. I stick mine into a lump of clay to hold it upright.

Bonus tip! This silicone putty also works fairly well to make small press molds, even ones with minor undercuts. Just press the freshly mixed putty around the object you want to duplicate, leaving the back open, then let it set up, remove the object, and voila! Your mold is ready to use. The trick for casting in clay is to brush

1


2


3

1 Examples of common things that work well as a stick base. **2** Measure and mix equal parts of the two silicone putty ingredients. **3** Roll the mixed putty into a smooth ball to eliminate cracks in the silicone.

4 Shape the soft silicone onto the stick base and squeeze it tight so it grips on well. **5** You can make any shape you need; thinner silicone will be more flexible. **6** These tools work very well to smooth clay in hard-to-reach places.

a good release agent like olive oil onto the mold before pressing in your soft clay. Then, gently flex the silicone mold open to remove your clay. There are limitations to this kind of clay casting, but I've had some success whereas a plaster mold would have been too rigid to release a complex shape.

Christina Orthwein is a long-time ceramic artist who has worked in pottery, tile, jewelry, and most recently is loving a switch to figural sculpture. For more information on Christina and to follow her process videos, go to Instagram @ChristinaSculpture or visit ChristinaOrthwein.com.

Building a Weathered Surface

by Angelo di Petta

Like a lot of potters and ceramic artists, I pretty much stumbled into working with clay. I didn't know much about it when I entered art school. My interest in architecture motivated me to pursue studies in interior design.

One of the required courses in my first year was an introduction to the craft studios. This involved five-week sessions in ceramics, metal, wood, and fiber. I enjoyed this introduction to materials and processes so much that it became clear to me that working with my hands as well as my head gave me great satisfaction. So, I abandoned my desire to study interior design. In my second year of studies, metal was my favorite medium, but by the end of my fourth year, I was fully immersed in the ceramics studio and graduated with a major in ceramics.

A turning point for me was a third-year class visit to a sewer-pipe factory. Enormous lengths and diameters of clay pipe were being extruded. Seeing this changed my ideas about how clay should be formed and what clay objects should look like. My fourth year was spent making dies and extruding stoneware and porcelain forms.

In the mid 1970s, I spent a year in Faenza, Italy—a center of pottery production and majolica since the 13th century—studying ceramic design and production processes. Earthenware was the dominant clay used for functional and decorative objects, tiles, and architectural elements. Imagery plays a very important part in all these applications. So it was there that my journey with low-fire clays and the use of molds began.

Inspiration

The natural and built environment are a major inspiration and influence on the work that I make. I see ceramic forms and surfaces in everything around me; abandoned buildings, layers of paint peeling off concrete walls, insect-eaten bark on trees, polished beach stones, etc. This is all visual information that eventually finds its way into my work. Each piece I make is an exploration of the natural process of weathering and the gentle wearing away of surfaces by water and sand. This process reveals layers of colors. The patterns suggest some other mysterious activity. My etching process mimics natural phenomena.

Casting Slips

I use several types of casting-slip in my studio, including a red and a white earthenware, mid-range porcelain, and black stoneware. Red and white earthenwares are my preferred clays. I have used

Angelo di Petta's low-fire cups, underglazed and etched.

Pour a red-earthenware casting slip into a dry plaster mold to create a small oval-shaped cup.

Drain the mold and leave it upside down for approximately 10–15 minutes.

Trim the reservoir away, then allow the piece to firm up until it pulls away from the mold.

Remove the piece from the mold, leave it to dry, then clean up the seams.

Apply a coat of black underglaze to the exterior of the piece.

Apply a layer of blue underglaze then turquoise, followed by other colors.

them since the 1970s for small functional and sculptural objects as well as large architectural installations.

In the early 1970s, reduction-fired stoneware ruled. Earthenware was considered hobby clay. But I liked the fact that it could be fired at lower temperatures. And since it had no otherwise outstanding visual qualities, it could be considered a blank canvas for an infinite variety of surface treatment and imagery.

I use Red Earthenware Casting Slip 805 made by Pottery Supply House in Oakville, Ontario. It has very good casting qualities, is smooth, and has a warm terra-cotta color when fired to cone 04. It casts a bit slower than white earthenware and porcelain.

Slip Casting the Forms

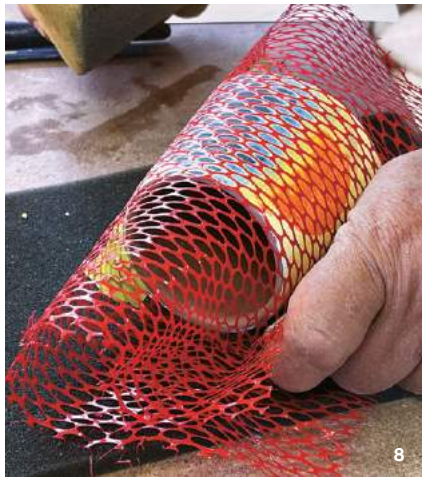
Since I discovered slip casting, using molds has been my preferred method of making forms. I enjoy the process of thinking through how I will make the model and the mold of the imagined form. Forms can be made this way that would normally be more difficult to create using other methods. Once the mold is made, I can make as many copies of the form and embellish them in a variety of ways to create one-of-a-kind pieces. Molds can be used for slip casing, press molding, and combinations of both.

To make a small vessel from a two-piece mold, pour red-earthenware casting-slip into a plaster mold and leave it for about 20 minutes (1). The plaster absorbs water from the slip. This process results in the build-up of a clay wall against the inside of the mold. Drain the mold of the remaining, non-absorbed slip when the desired thickness is achieved (2), then flip the mold upside down for a few minutes so that the slip fully flows out. After 15 minutes, turn the mold back over, trim the top (3), and allow it to sit until the cast releases from the mold and can be removed (4). Once the cast form is dry, clean it with a damp sponge to remove any sharp edges or unwanted marks.

Designing the Surface

I have used the etching process for many years, but what inspired this particular series was the plastic netting that I found on cartons of clementines. It seemed like the perfect material—simple cut-out pattern, thin, flexible, reusable, and free. It worked very well with

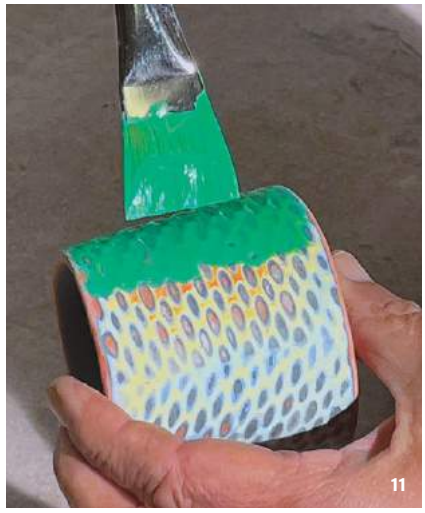
Use a stencil to apply the final layer of orange underglaze.



Using plastic mesh, remove layers of underglaze with a damp sponge.

Once the etching is complete, the piece is now ready to be bisque fired.

Bisque-fired mugs with liner glaze. Note the orientation of the plastic mesh can be rotated to create a variation of the etched pattern.



Apply a liner glaze to the interior and a clear glaze to the exterior. Fire again.

the layering of colors and patterns. My goal was to create as much visual activity as possible on a limited surface.

Etching the Surface

The first step to creating the surface is to layer many colors of underglazes on to the greenware piece. I start with a black layer to coat the entire exterior of the form (5). Then, I use blue, turquoise, red, yellow, and orange layers in random patterns. I use masking tape and stencils to create these shapes (6). The lighter colors are used last (7). I apply one coat of each color of underglaze. I prefer the consistency of the underglaze to be thicker rather than flowing and use a soft ¾- or 1-inch brush to apply it. This gives me a smooth surface. I allow the layers to dry between coats.

The next step is to create the relief patterns. This is done by etching, essentially wiping away to reveal the layers of colors. I use a masking material, in this case the plastic netting that comes with boxes of clementines. The netting is stretched over the form (see 8), taking care not apply too much pressure that could break the greenware. I then use a damp sponge to gently wipe away the underglaze layers until the black layer or the base clay is revealed (8). The neat part of this process is the control one has as to how much to etch, or how little.

Finishing the Surface

When I feel the etching is complete, I apply 3 or 4 coats of red terra sigillata to seal the bottom. The piece is then ready to be bisque fired to cone 04 (9).

After the bisque firing, I apply a commercial liner glaze to the interior (10) and a clear glaze over the etched exterior (11). The glaze firing is taken up to cone 06.

Angelo di Petta's home and studio are located in the rolling countryside near Millbrook, Ontario, Canada. He graduated from the Ontario College of Art (now OCAD University), and for 46 years has shared his knowledge of ceramics, model and mold making, and design through teaching, lectures, mentorships, and workshops. To see more of Angelo's work, visit dipetta.com and @angelodipettaceramics on Instagram.

Red Clay Ready

by Ruth Easterbrook, Megs LeVesseur, and Taylor Mezo

The following glaze and terra-sigillata recipes accentuate the deep earthy tones of red clay bodies at low-fire and mid-range temperatures.

1

2

3

1 Ruth Easterbrook's *Garden Cake Plate,* 12 in. (30 cm) in diameter, wheel-thrown red stoneware clay, multiple glazes, including Tony Hansen Silky Matte Glaze, fired to cone 6 in oxidation, 2021. **2** Megs LeVesseur's *Botanical Short Mug 1 (Red),* 4 in. (10 cm) in height, Sheltowee red stoneware claybody from Kentucky Mudworks, handbuilt, altered slab construction, terra sigillata, clear glazes. **3** Taylor Mezo's *Blue Arch Candelabra*, 11 in. (28 cm) in height, red earthenware, terra sigillata, Base Glaze (Teal color variation), black underglaze, fired to cone 1 in oxidation, 2021.

Ruth Easterbrook's Recipe

TONY HANSEN SILKY MATTE (1)

Cone 6 Oxidation

Wollastonite	26.47 %
Ferro Frit 3124	35.29
EPK Kaolin	19.61
Calcined Kaolin	13.73
Silica	4.90
	100.00 %
Add: Best Black Mason Stain	2.94 %
Sage Mason Stain	1.96 %

I use this recipe as a background glaze. I originally found this glaze on DigitalFire (https://digitalfire.com) when searching for matte glazes. It is a lovely surface but can be a little sensitive to application; if applied too thick, it blisters. This is a great base for adding color. Note that I use a black and sage green Mason stain together in the glaze, which will have a greenish tint on white clay but not on the red clay that I use. There is also a very high percentage of clay in this recipe, so I add more water than I do for most glazes at 80–85% hydration.

Megs LeVesseur's Recipe

TERRA SIGILLATA (2)

Cone 5 Oxidation

Water	20 lbs
OM 4 Ball Clay/XX Saggar	10 lbs
Darvan 7	30 g

This recipe is based on Kari Radasch's formulation. Mix contents thoroughly in a 5-gallon bucket with a drill and place on a tabletop. Let the mixture sit for 10 hours. The water, terra sigillata, and heavier slip particles should separate into 3 parts. The next step is to siphon the center layer (which is the terra sigillata) into a bucket on the ground with the help of gravity. Store the terra sigillata in an air-tight container until needed. I make 5–6 batches at a time because the older the terra sigillata is, the easier it is to work with—a very helpful tip I learned from Mark Arnold. When adding colorants/Mason stains to small batches, I use 1 teaspoon to ½ tablespoon of various Mason stains to 1½ cups of terra sigillata to achieve my desired color tint. Measuring the Mason stains by volume rather than by weight yields a wider variety of colors from batch to batch.

I consistently use the following Mason stains to make colored terra sigillatas:
4150 Red/Pink, 4200 Orange, 6236 Chartreuse, 6242 Bermuda, 6315 Turquoise, 6343 Mediterranean, and 6363 Sky Blue.

Taylor Mezo's Recipe

BASE GLAZE (3)

Cone 04 Oxidation

Ferro Frit 3124	80 %
Nepheline Syenite	10
OM 4 Ball Clay	10
	100 %
Add: Zircopax	10 %
Bentonite	2 %
For Teal:	
Mason Stain 6219 French	5 %
For Light Pink:	
Mason Stain 6029 Lobster	7 %

This is a very versatile base glaze. I didn't formulate it myself, but I can't recall the source. I automatically add 10% Zircopax to get an opaque white, and 5–10% Mason stains. This glaze is opaque enough on the red clay body that I use that I don't need to prime the surface with a white slip. All of my work is bisque fired to cone 1 and glaze fired to 04. When I glaze, I use a little squeeze bottle to deposit glaze onto the surface (this helps it adhere better than brushing or dipping). I usually add a splash of CMC gum solution as well.

Calculating Clay Shrinkage

by Audry Deal-McEver

Have you ever broken the lid to a fully finished teapot and needed to make a replacement? If you simply measure the lid with calipers, the measurement won't be accurate. Some clays shrink 8% or even 14% from freshly formed to the fired state. That can be enough of a difference to sabotage attempts to remake the broken piece, unless you accurately calculate how much larger it was before it shrank.

While helping a student with this exact problem, I had an aha moment. I had recently used a copy machine to enlarge a small image. What if I photocopied the broken lid, then used the copier to enlarge it by the correct percentage?

This solution involves knowing how much your clay shrinks, then doing some math. Most clay companies list shrinkage rates on their websites. If you mix your own clay, you can figure this out by making a shrinkage ruler. (Several great Ceramic Arts Network videos pop up on YouTube if you search for "determine clay shrinkage.") As for the math, use the following equation, where X equals the shrinkage percentage:

(100 ÷ (100 – X)) • 100 = unfired equivalent size

To simplify this process for my students, I created a Clay Shrinkage Calculator on my website that allows you to enter the percentage your clay shrinks, click the "calculate" button, then the "unfired equivalent copy size" is determined. Punch this into the photocopier settings to enlarge by that percentage, tape your broken lid back together, photocopy it, then take a measurement off of the printout using calipers. Voila! Now you can remake the piece with fresh clay using the copy as a guide.

1 Photo of broken teapot lid. **2** The lid taped back together. **3** Enlarged photocopy of the underside of lid being measured with calipers (the broken lid is also included in photo for comparison).

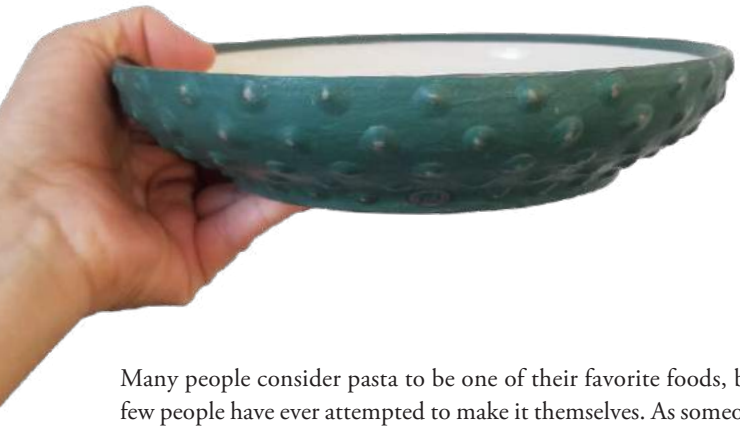
To use my calculator, visit www.AudryDealMcEver.com and click on "Clay Shrinkage Calculator" in the menu.

Designing Function

Architecture and pottery have much in common. Architecture is the art of enclosing space. Pottery is, in essence, miniature architecture, displacing and enclosing space by the development of three-dimensional forms. Spheres, cylinders, domes, arches, and cones are forms associated with both architecture and pots. The development of complex forms is infinite in variety, and the above two-dimensional drawings show a montage of utilitarian forms using the circle, square, rectangle, triangle, and ellipse. —Excerpted from *Functional Pottery: Forms and Aesthetic in Pots of Purpose* by Robin Hopper.

Pasta Blates (bowl + plate)

by Wendy Eggerman



Many people consider pasta to be one of their favorite foods, but few people have ever attempted to make it themselves. As someone who loves to make pasta from scratch, I find it very rewarding and surprisingly simple. And of course, being a potter, I am equally interested in how a well-designed plate can enhance the fresh-made-pasta experience. I have found (after enjoying many pasta meals), that the best type of dish to use is something between a bowl and a plate. Some people might refer to this shape as a "blate" (bowl + plate). They have the spaciousness of a plate combined with the containment of a bowl. It might seem like a small adjustment, but you'll find the slight curve of the rim enables you to easily catch every noodle while keeping the sauce in the dish.

Throwing

The first step in making pasta plates is to weigh out and wedge 3½ pounds of clay. Much of this weight will eventually be trimmed off, but it is needed to provide a substantial foot.

Center the clay on a bat into a low puck (1). Once you're certain the clay is centered, drag the clay toward the outside of the bat (to about 3 o'clock, if you're throwing right handed). This part will be the floor of the plate, so be sure it is even and leave ½–¾ inch thickness. I use the side of my fist to drag the clay because I find it keeps the floor more even and gives me more strength than if I used my fingers. The heel of my left hand pushes down and in, to keep the clay firmly attached to the bat. Drag the clay until it's about 8½–9 inches diameter, leaving the edge a little thicker, so there is some clay left to pull up (2). But before you pull the edge, be sure to compress the floor. One of the most common reasons plates fail is that the floor is not sufficiently compressed, thus causing cracks.

Now you're ready to pull up the edge. Pull the last, outermost bit of clay up and out—this won't be very tall (about two inches from the bat) (3). The goal is to make the plate about 10 inches in diameter, any smaller and there might not be enough space for a full serving of pasta. Remember: the magic of a pasta blate is found between a plate and a shallow bowl. If you want a wide rim, pull the clay up and then out much farther (this might require you to start with a little more clay).

Before you take the thrown pasta plate off the wheel, there are a few items to consider:

- Are you happy with your rim? Try not to make the rim too thin (or it will be prone to chipping). You'll want to compress the rim (again, compression helps avoid cracks).
- Compress the floor again. (Yes, again; compression is the name of the game). At this point I use either a stiff plastic kidney rib or similarly shaped metal rib.
- Make sure the transition from floor to wall is seamless. Here a rounded rib can help smooth out any lumps or bumps.

Once you are happy with the shape of your pasta plate, it's drying time. Plates take a long time to dry and the rim dries much faster than the middle. Depending on the humidity of your studio space, it could take a few days and you might need to cover just the rim

Center 3½ pounds of clay (or a little more if you want a wide rim) into a low puck.

Drag the clay out to create the floor. The clay should measure about 9 inches before pulling the walls.

Make sure the inside of the pasta plate is smooth and compressed before taking it off the wheel.

Center the plate. I tap to center and use an old jar lid to hold the plate down.

Trim the extra clay until even, while being mindful of the outside surface texture. I use a serrated rib to create texture when done.

Wendy Eggerman's finished pasta plate, shown with handmade pasta and tomato sauce.

and leave the middle exposed. You know best how your pots dry, just make sure to check regularly until your plate is evenly leather hard.

Trimming

To trim, I tap the form to center it and use an old jar lid to hold down the pot on the wheel head (4). As you trim, be sure to leave a sturdy foot ring about midway in from the rim when viewing it from the bottom of the plate. Remember, you're going to remove a lot of clay while trimming. The clay should come off in long ribbons; if it's getting stuck to your trimming tool, it's too wet, so leave it to dry a bit longer.

When you think you're getting close, pick up the plate and check the thickness. How does the floor feel? The walls? Is everything even? Is the pot heavy?

Finishing

All my pots are made with earthenware and finished with terra sigillata. I like to add texture to my pots when they are leather hard, as soon as I'm done trimming. Texture gives the terra sigillata depth and can be achieved many ways. I usually use a serrated rib (5), chattering, or slip, but really, the world is your oyster. At this point, keep in mind how you are going to glaze your pasta plate. If you have a thick matte glaze, any surface detail would be lost. If you are using a translucent glaze, some underglaze or mishima might look nice.

When it's time to glaze, I use a glossy, off-white liner glaze on the interior of my pasta plates. I find a simple glaze looks nice with pasta (6). Also keep in mind, pasta is almost always eaten with a fork, and a dry glaze is going to give a nails-on-a-chalkboard feeling. Be sure that your liner glaze is food safe.

Wendy Eggerman is a full-time potter in Saint Paul, Minnesota. Her pots are inspired by antiques and informed by her love of cooking. See more at: www.FunctionalHeirlooms.com or Instagram @FunctionalHeirlooms.

Bringing Joy to Life with Melissa Maya Pottery

by Maya Rumsey

1

In my work, I try to balance clean, simple lines while allowing my hand as an artist and maker to show through. When coming up with new work, I like to create designs that are stripped down to their basic elements. I like to see how much I can simplify a design while keeping it warm and engaging, as well as obviously what it's meant to be whether that's a mug, vase, planter, or a little figure. I find myself gravitating toward work that honors the clay itself and allows you to see how it was made. When I throw on the wheel, I leave a swirl in the bottom, or when I handbuild, I will leave some of the rough texture. I think of these as clues to show that hands have shaped each piece and give a sense of how it was made. There is something captivating about handmade work that's hard to put into words. I want to honor that.

When I make mugs, I work in batches that are divisible by 4, typically 16 or 20 at a time. I'll make vases in batches divisible by 3. I think this is a good metaphor for working as a functional potter. We all have our own little arbitrary rules that guide how we make our work. Maybe we heard them somewhere, maybe we made them up to match our own studio rhythm or keep ourselves on task. I don't believe there's one right way to do it. If, in the end, you have a cup that is food safe that you can drink out of, you've succeeded in making a cup. This is simply how I currently make my mugs—in five years that might change, and I want to give myself room for that.

Beginning a Mug

When I am coming up with a new design, I can spend a lot of time simply daydreaming about it. This phase can last a day or years. When I'm ready to start designing, I'll go to Google images first. As an example, I might search pictures and drawings of magnolias in bloom. I like to print out some of the images to have a hard copy. While I don't make a lot of sketches before I work, the sketches I do make are typically silhouettes and rough ideas for designs (A). I prefer to make first-draft pieces when working on a new design. From there, I can tweak and fine tune it with further iterations to get the desired results.

I throw mugs on the wheel using between 1 to 1¼ pounds of Georgie's Trail Mix Toast clay for each mug (B). I used a white porcelain/stoneware mix for eight years before switching to dark clay. After a lot of testing, I chose this clay body because I loved the rich brown color when fired in the electric kiln. It has some grog that helps with making bigger pieces but not so much that it's a pain to throw with. After working for so many years with a more fine-grained clay, I was eager to get my hands into a rich stoneware that I could push a little more.

1 Maya Rumsey in her studio. *Photo: Keely Brennan*. **2** *Gray Bird Mug*, 3 in. (8 cm) in length, wheel thrown, 2022. **3** *Magnolia Bowl*, 13½ in. (35 cm) in length, handbuilt, 2022. **4** *Memorial for George Brown Vase and Cups*, to 7¼ in. (18 cm) in height, wheel thrown, decals, ashes, 2020. **5** Rumsey's mom (Moira MacAvoy), grandma (Peggy MacAvoy), and Polly in front of their magnolia tree. *Photo: Moira MacAvoy*. **2–4** Georgie's Trail Mix Toast clay, underglaze, glaze, fired to cone 6.

The next day, I pull the handles for that batch of mugs from a large lump of clay. I start by pulling the blank form. This is approximately how thick I want the handle to be at the top and bottom. Then I go in and pull the middle of the handle to the thinness I am looking for (C). After cutting it off of the hump, I place it on my ware board to dry.

Then, I trim my mugs on the wheel with a Giffin Grip and my Do All tool from Mudtools (D). When the handles are dry enough that I don't leave a fingerprint on the surface, but they are still pliable enough to bend, they're ready to be attached to the cups (E). I cut the extra material off, press the ends into the side of my table to fatten up the top and bottom, and then pinch out a little skirt around the parts that will be attached. After scoring the mug and handle with a little water, I push the handle into place. The skirt that was pinched out earlier provides enough clay to smooth the handle onto the cup. I'm looking to create a clean, seamless transition between cup and handle (F).

Adding Surface Designs

The decorating phase for any pieces that will have drawings on them begins after the bisque firing. Using a 2B pencil, I sketch out my design on the mug (G). The pencil lines act as a guide when adding underglaze colors. I work with Amaco Velvet Underglazes. I use paintbrushes that have a beveled edge on the end of the handle for large areas. These brushes give me the ability to scoop up more underglaze and use the beveled edge to spread it where I would like it (H). For some of the designs, I mix the colors on the pot to create a swirled effect. To do that, I paint the first color in a thick layer, then add the second color while the first color is still wet. Before it dries, I use the brush to swirl the two colors together (I).

After the underglaze is dry, I use the underglaze pen from Axner/Laguna with an extra-fine tip to apply black lines around the forms. Typically the underglaze will be a bit too thick when poured into the bottle on the underglaze pen, so I add a few drops of water at a time until it flows smoothly (J). I can carefully wipe away little mistakes if needed, but try to avoid that. I find those little bumps and wobbles to be evidence of the artist's hand, and so I leave them.

After decorating the mugs, I go over my designs with Aftosa wax resist. I put the wax around the whole design, so that the underglaze is left raw and there is a halo effect around the design where the dark

A Maya Rumsey's sketchbook. **B** Throw the body of the mug. **C** Pull a handle from a lug of clay, then curve it into the desired shape and set aside to reach soft leather hard. **D** When the mug reaches leather hard, trim a foot ring into the bottom of the form. **E** Cut the handle to length, widen the ends, score the attachment areas, apply slip, and attach. **F** Adjust the angle of the handle to the desired contour. **G** Sketch surface design motifs using a pencil.

H Apply underglaze to the surface designs. **I** Mix underglaze colors to achieve a swirled effect. **J** Apply a darker underglaze using a fine-tipped slip trailer to outline the colored underglaze shapes. **K** Apply wax resist over the underglaze surface design on the bisque-fired mug. **L** Dip the mug into glaze. **M** Clean any glaze drips and dots off of the waxed areas of the surface. *All process photos: Keely Brennan.*

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clay will show through (K). I apply it in a pretty thick layer and let it dry for at least 12 hours (preferably more). When the mugs are ready, I dip them into glazes that I mix myself (L). I use a damp sponge to clean up any stray glaze on the waxed areas (M). One of the main glazes I'm using is a white matte glaze from Jen Allen that I saw in a past issue of *Ceramics Monthly*. After testing it, I realized that on my clay body, when fired to cone 6 with a slow-cool program, this glaze turns out glossy and drippy, mostly off white with toasty brown coming through. This is why I call it my "Toast" glaze. It looks very different on Jen's work! When I add 5% 6600 Mason stain to it, the glaze turns into a beautiful satin-matte black. Finally, after the cone-6 firing, I wet sand all of the unglazed areas. A mug is born!

Design and Inspiration

I first drew my magnolia motif on a special project I made for my dad two years ago. My dad was an eccentric person. Sometimes he was a lot of fun, other times he was scary. He often seemed to be living on a completely different planet from the rest of us. The Victorian house we lived in was a sort of obsession of his. Taking care of it was practically a full-time job for my mom, and when she divorced him after I left for college, it fell apart around him. Even so, he always saw it as his palace.

In 2018, my dad passed away. After his death, his hold on my mind loosened, and I found it was easier to look back at my childhood and remember the good times and things that brought me joy—like the big magnolia tree in front of our house. I designed vases and cups that incorporated decals of our house along with drawings of magnolia blossoms. I used my dad's ashes as a wash under the glaze on all parts of the vases and on the bottoms of the cups, where it looks like a crater glaze.

Much of my inspiration comes from what brings me joy. I love drawing magnolias because they remind me of that joy I would feel every spring when our tree would burst into pink. Even if things felt impossible to get through at home, it was still magical when the magnolia tree bloomed. I like to draw houseplants because with them, my house feels more alive. And I love birds. My mom and grandma passed that love on to me. I have many fond memories watching the birds at the feeder with them or looking up new arrivals in the field guide. When I was in college, I became more interested in birds because this interest gave me a way to connect with these important women in my life. Over time, I've grown to love our feathered friends that are always around us, and incorporate them into my drawings on pots as well as sculptural forms.

I like to make work that brings me and my audience some sort of joy. I like my work to be approachable, comfortable, soothing, and a bit nostalgic. I also want it to be ever evolving. For people who have experienced my work, whether through using a piece in their home or watching one of my videos online, I hope it brings them a sense that, in some way, we are going to be okay.

Maya Rumsey is from Toledo, Ohio, and graduated with a BFA from Bowling Green State University in 2008. She now lives with her husband and two daughters in Coeur d'Alene, Idaho, where she works in her basement studio. To learn more, visit melissa-maya-pottery.myshopify.com or follow her on Instagram @melissamayapottery.

6 *Black Magnolia Mug*, 3 in. (8 cm) in height. **7** *Monstera Adansonii Mug*, 2¾ in. (7 cm) in height. **8** *Rainbow Triangle Mug*, 3 in. (8 cm) in height. **9** *Toast Magnolia Mug*, 3½ in. (9 cm) in height. **6–9** Pieces are wheel-thrown Georgie's Trail Mix Toast clay, underglaze, glaze, fired to cone 6, 2022.

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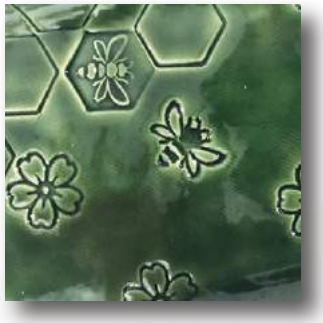

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