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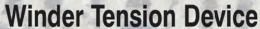
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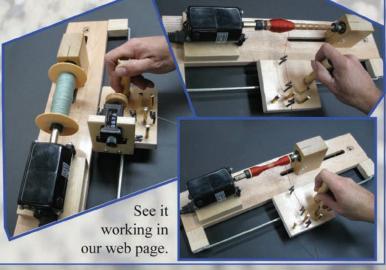




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Contents

May/June 2022, Volume XLIII, Number 3

FEATURES

14 *Idea Gallery:* Paper Weaving— Intriguing and Inspiring!

TOMMYE MCCLURE SCANLIN

Weaving with paper allows you to explore weaving ideas—without even touching yarn or a loom. Tommye starts with the basics of plain weave before explaining more complex structures and concepts.

20 Notes from the Fell: Poppana

TOM KNISELY

A photo of a shuttle put Tom on the path to exploring the world of poppana, bias-cut fabric strips that require a special shuttle. He jumped right in, wove a sample, and learned a lot about this unique weft.

24 Best Practices: Fixing Mistakes

SUSAN BATEMAN AND MELISSA PARSONS

No matter how careful you are, sometimes mistakes show up on the loom and in your finished cloth. Susan and Melissa share methods for avoiding making the mistakes in the first place and for fixing them when they slip past you.

$28\,$ Selling Your Handwovens

DEB ESSEN

Selling your handwoven items requires more than just slapping a price on them. Deb outlines the steps she takes to find her customers and educate them about the value of handcrafted, handwoven items.

PROJECTS

- 36 Vakker Mug Rugs
- **40** Wall of Troy Fade Napkins CHRISTINE JABLONSKI
- 43 A Basket of Stripes MEGAN M. MACBRIDE
- 46 Broken Stripe Towel
 PATTY CRANE
- **49** Candy Stripe Blankets MALYNDA ALLEN

- 52 Gold Rush Shawl
- **56** Advancing by Steps DEBORAH HEYMAN
- **59** Natural Elegance
 JUDY STEWART
- 62 Sunset Twist
- 68 Big Wrap Beach Blanket
 CYNTHIA NEWMAN
 WITH KATZY LUHRING

32 Sampling for Bedford Seersucker

JANET PHILLIPS

Follow Janet as she moves from sampling Bedford cord to weaving Bedford seersucker.

66 Traditions: A Brief History of Turkish Towels

K. ROSE JAMES

The history of Turkish towels dates to the Ottoman Empire when they were used to preserve modesty in the ubiquitous Turkish baths. Their weave structure and styling have changed over time, but the towels remain popular today, and some are still woven by hand.

72 Yarn Lab: Scheepjes Yarns

BARBARA GOUDSMIT

Although Scheepjes Yarns are often considered knitting and crochet yarns, Barbara uses two types in a variety of weave structures to show how their unique characteristics can create unusual fabrics.

DEPARTMENTS

- 4 From the Editor
- 6 Letters
- 6 Project Index
- 8 Goods: Favorite Finds
- 9 Media Picks
- 12 What's Happening: Convergence SUZI BALLENGER
- 58 Advertiser Index
- 76 Reader's Guide
 Project Directory
 Suppliers
 Finishing Techniques
- 78 Marketplace Directory
- 80 Endnotes

 ANNE ELIXHAUSER

I'

I've got sampling on my mind right now, probably due to flaming out on two samples for a baby blanket.

For the first one, I made the mistake of assuming my huck-lace drawdown would translate into pretty cloth. When I showed the sample to a friend, she remarked that if it had been a blanket, she would have told me it was beautiful, but as it was a sample, she could

agree with me that it was ugly. What else could you ask for in a friend? For my second sample, I switched to turned twill. I can see that one of the warp colors isn't working with the other warp and weft colors. I need to change out those 40 ends. If you've ever swapped out ends, you know why that sample hasn't been touched in over a week. It's a "fun" process, right up there with adding repair heddles and retying your loom for turned twill after it was tied up for huck lace.

It wasn't a big reach to plan an issue around twills; they are a perennial favorite among weavers. Twills can be simple or complex, but they are always based on floats that add surface design, texture, and drape. The 10 twill projects in this issue mirror that versatility. They range from a simple four-shaft broken-twill towel by Patty Crane to an eight-shaft advancing-twill shawl by Deborah Heyman. In her article about weaving with paper, Tommye McClure Scanlin starts with plain weave but then shifts to describing how to weave twills. In Notes from the Fell, Tom Knisely talks about weaving with poppana fabric strips, and Janet Phillips takes us through her process of sampling for Bedford seersucker. In Traditions, K. Rose James writes about Turkish towels; today they are often woven as twills, but they have been woven in other structures in the past.

Our other articles include tips from Deb Essen on selling your handwovens, Susan Bateman and Melissa Parsons sharing best practices for correcting mistakes both on and off the loom, and a Yarn Lab by Barbara Goudsmit using two yarns from the Dutch yarn company Scheepjes. The What's Happening article about Convergence will get you excited about seeing your weaving friends in person again, and Anne Elixhauser's Endnotes about weaving special voyageur scarves for a group of young female canoeists will inspire you.

Weave well,



FUTURE THEMES

SEPTEMBER/OCTOBER 2022

Cut and Sew

We know it's scary, but sometimes you need to bite the bullet, cut that handwoven fabric, and do some stitching. This issue will be all about weaving and using handwoven cloth for creating garments, bags, belts, pillows, and anything else you can think of that is even more special when made with fabric from your loom.

NOVEMBER/DECEMBER 2022

Exploring the Ifs

Many aspects of weaving are clear-cut, but there is still room to play. This issue will look at the "as ifs" and "what ifs" of weaving. "As ifs" are those times when a weaver decides to weave a threading using another structure's treadling, and "what ifs" are when a weaver decides to throw caution to the wind and experiment.

JANUARY/FEBRUARY

Wool and Wool Blends

Weavers love wool for many reasons: it's warm; it takes dye beautifully but also comes in many natural colors; and last, but surely not least, it's forgiving on the loom, making it a great fiber for beginners. Wool blends have many of the same characteristics and add a few of their own.

HANDWOVEN.

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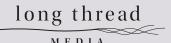
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Letters

Stories, tips, tricks, and questions from *Handwoven* readers

In Letters in Jan/Feb 2022, Deb Chandler put out a call for tips on making the weaving process easier. Here are some more readers' responses.

Dear Deb Chandler and the editors at *Handwoven*.

Thanks so much for suggesting this column on how to preserve yourself while weaving. How perfect! These tips have been on my mind all week as I finish a set of towels with an obvious "feature" in the warp, one that can't be easily changed. I think I wouldn't have made this mistake in warping if I had taken more breaks.

My first tip is to take more breaks when doing anything that involves counting. My memory and eyes are slower, so when I sit behind the eight-shaft loom threading the heddles with 8/2 cotton, I find I make maybe two mistakes in 45 inches of pattern, no matter how carefully I count and thread. Of course, I don't notice it until I start working with the weft. My focus is not as good as it once was (both mentally and physically). My mind wanders, I mistake shaft 4 for 3, etc. I think I'm doing fine— I'm not. Take a break.

Second, count your threads and tie small bundles of 20 threads after putting threads through heddles. Then doublecheck your threading. I've always done this to some extent, but it becomes more important now.

Thirdly (and surely everyone knows this, but it is so hard to adhere to), play music instead of your favorite podcasts while weaving. Your mind will wander while weaving, and you'll have to take out a few rows. It is not worth it to get caught up in someone else's thoughts. If you're like me, you're having enough trouble just adhering to the pattern at hand.

Thanks as ever for your wonderful magazine.

Lydia Dehn, via email

I suggest getting a four- or eight-shaft table loom. Because the treadling is done above by hand, it means not going under the loom for tieups. Also, the rigid-heddle loom has many possibilities besides color, texture, and stripes in plain weave. I often use a pick-up stick and do twill borders on alpaca scarves. In addition, an inkle loom or tablet weaving might be of interest. So many wonderful patterns are possible. During the pandemic, weaving keeps my hands busy and my brain working. I need inspiration! Whatever you do, don't give up weaving!

Chris Switzer, via email

Dearest weavers, my discovery is not about weaving itself but about finishing. I wove a soft scarf from Tencel and bamboo, and I discovered some undesirable weft floats that I needed to repair. It occurred to me that tensioning the fabric with an embroidery hoop would made this task much easier.

Regards and happy weaving,

Gabi Tomas, via email

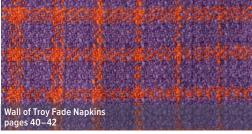


Using an embroidery hoop to tension cloth makes fixing floats off the loom easier.

Photo courtesy of Gabi Tomas

Project Index















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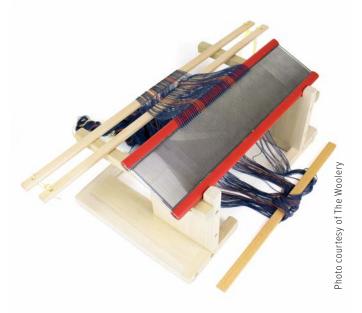


Photo courtesy of Eucalan

Travel Laundry Kit

Keep your handwovens safely clean even while traveling with Eucalan's Getaway Gang. The kit, packaged in a clear zip bag, contains everything you need to safely clean your precious handmade cloth while on the go, along with a nail file and sewing kit for small repairs. Each kit includes eight single-use pods of Eucalan, a no-rinse wool wash that is nontoxic, biodegradable, and bleach- and phosphate-free, plus six stain-treating wipes to assist in emergency cleanups. Whether you're attending a weaving conference and need your handwovens to look good or simply enjoying a family vacation and want an easy way to wash clothes and treat stains, the Getaway Gang will make it easy. eucalan.com

Hemstitching Guide

Hemstitching is a wonderful way to finish scarves and shawls, but if you don't do it regularly, it can be easy to forget the steps. Fortunately, Schacht Spindle Company's new "A Weaver's Guide to Hemstitching" is here to help. The foldout card features illustrated step-by-step instructions on how to hemstitch at both the beginning and the end of a piece. Even better, the card is designed to hold an included tapestry needle, so once your memory is refreshed on how to hemstitch, you won't have to remember where you last put your needle. schachtspindle.com



Photo courtesy of Schacht



Beginners Dyeing Kit

Want to get started dyeing but you're not sure where to begin? The Ashford Introduction to Dyeing Kit makes a perfect entry into the world of creative color. Each kit comes with four dye colors, two 100-gram skeins of yarn in a wool/nylon blend, instructions for dyeing, "recipes" for mixing colors, information on color theory, and a color wheel. The dye works on all protein fibers and requires only white vinegar as a mordant. ashford.co.nz

Photo courtesy of Ashford



Spinning Tails Tom Knisely

In 2019, Tom Knisely ventured out of the world of traditional weaving books and into children's literature with his delightful picture book The Weaver's Surprise, a story about a friendly weaver, a family of mice, and how weaving brings them together. This past year, Tom wrote a new book continuing the story of the weaver and his small furry friends. Aptly titled Spinning Tails, this new story focuses on yarn production: sheep shearing, processing the wool, natural dyeing, and spinning on a drop spindle.

Once again, for this review I brought in an expert in the form of my now five-yearold son, Henry, who, at one point, had most of The Weaver's Surprise committed to memory. Would this new book pass muster with Henry? I put it to the test during a bedtime reading session. Henry listened intently and interrupted me multiple times to ask questions about the sheepshearing scissors and the plants used for natural dyeing. (He also questioned how the weaver managed to warp his loom and weave most of a blanket in one day when Mama "takes forever to weave.")

The book requires no prior knowledge of yarn production and is an excellent introduction to the topic. Henry was more than entertained; he was also inspired. At the end of the book, Henry and I discussed the process of making yarn and talked about the tools the weaver used. Henry was excited to find out that some plants could be used as dyes and let me know in no uncertain terms that he wanted to try his hand at dyeing with plants this summer. It's safe to say this book is both Mama and Henry approved.

Of course, I cannot complete this review without talking about the illustrations, beautifully rendered by Megan Lloyd, who also illustrated The Weaver's Surprise. Once again, the pictures are beautiful, and the images of fiber tools are lovingly—and accurately—depicted. (Henry especially appreciated the drawings of mouse-sized spindles made from buttons and toothpicks.) If you're looking for a book for somebody young in your life, or if you're simply young at heart, Spinning Tails is a delight from start to finish.

-Christina Garton (and Henry)

Guilford, CT: Stackpole Books, 2021. Hardcover, 32 pages, \$16.95. ISBN 978-0-8117-3914-6.

When she's not chasing her two boys, CHRISTINA GARTON is the Associate Editor of Handwoven and the Editor of Easy Weaving with Little Looms.

The Book of Looms: A History of the Handloom from Ancient Times to the Present **Eric Broudy**

A whole slew of textile and weaving historians exist who catalog the minutiae of cloth, patterns, drafts, fibers, dyes, and mechanical looms. Handlooms receive mention only in passing, usually regarding tieups. Eric Broudy redresses that oversight.

In many respects, the prehistory of the handloom parallels that of the hammer: We can't assign a specific date to when humanoids first learned to twiddle fibers into yarn or picked up a rock to crack open a nut or an enemy's skull. Nor can we pin down when someone figured out how to interlace fibers into grids or attached a handle to the rock.

The independent invention of hammers and handlooms by cultures widely separated by time and space also intrigues historians, as does the fact that the essential form of each has remained unchanged since inception. Minor tweaks, such as peens and claws for hammers or heddles,



efficient beaters, and treadles on looms, are all that can be cited. In the loom's case, these innovations were mostly designed with an eye to increasing the speed and quantity of cloth production. However, "it would be a mistake to assume that the technological advances necessarily improved the quality of the woven material. In fact, a sizable number of textile historians have argued the contrary," asserts Broudy. The book ends on this rallying cry for all handweavers: "The true limitations of the loom lie not in the machine but in the hand and the eye of the artist."

Broudy traces handloom development from the Upper Paleolithic period (40,000 to 10,000 years ago) through the current and ongoing Anthropocene Extinction era. The book begins with basketry, mat making, and the effect the discovery of spinning had on how the fiber at handflax, wool, cotton-fueled loom configuration and add-ons. He describes the vertical warp-weighted loom and its brilliant progeny, the readily recognizable two-bar loom. He discusses vertical Pueblo looms that the Navajo adapted, highly portable horizontal backstrap looms, and their many cousins. Skipping lightly over the Western Industrial Revolution (instigated by mechanized loom technology), treadle looms appear in all their variety, speedily followed by compound harnesses and drawlooms.

Abundant illustrations offer a wonderful glimpse into how human minds solve problems. While the prose can be dense in places, Broudy provides many conversational and humorous moments. The *Book* of Looms won't keep you feverishly turning pages far past your bedtime, but the slowpaced insights it offers are worth the price.

-Kathy Fitzgerald

Waltham, MA: Brandeis University Press, new edition, 2021. Paperback, 176 pages, \$35. ISBN 978-1-684580828.

On most days, KATHY FITZGERALD enjoys the delights of her 1960s-vintage jack loom. She is endlessly grateful to whoever first twiddled fiber into yarn.





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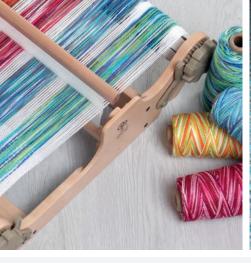






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The Return of Convergence

Suzi Ballenger

Convergence, the ultimate biennial fiber art conference held by the Handweavers Guild of America (HGA), is back! This international gathering of weavers, spinners, dyers, and basketmakers will be held July 15-21, 2022, in Knoxville, Tennessee. HGA has planned an exciting week of activities and events and invites you to join fellow fiber arts enthusiasts at this immersive convention.

Convergence includes a bustling Marketplace, over 100 educational sessions, a phenomenal fashion show, and 10 intriguing exhibitions of fiber art. The educational sessions range in length from 90 minutes to 3 days and cover a range of topics that include basketmaking, braiding, design processes, dyeing, felting, spinning, tapestry, weaving, and more. You can dabble or immerse yourself in a topic as you like. The Marketplace and exhibits close on Monday, July 18th, but the educational sessions continue for three more days through Thursday, July 21.

The Wearable Art Fashion Show, this year dubbed Seasons of the Smokies, takes the stage on Friday, July 16, featuring juried works by fiber artists from around the world, the designs of college students who accepted the Fashion Design Challenge, and the works of three invited artists: Daryl Lancaster, Dianne Totten, and Judi Gaston. These inspired creations are as diverse and unique as the flowers, weather, climate, colors,



Models show off beautiful handwoven garments at a previous Convergence fashion show. This year's theme is Seasons of the Smokies.

and outdoor activities that change and unfold with each season. Like a breathtaking view of the Smoky Mountains on an autumn day, the artists' creativity and use of colors and textures will leave you in awe.

Due to the cancellation of Convergence 2020, this year's Convergence features twice the number of juried exhibits including two each of mixed media, yardage, wearable art, and basketry. In addition, two nonjuried exhibits featuring the works of the conference leaders and interns will be on display. If that isn't enough fiber for you (!), there will be several fiber art exhibits on display around Knoxville, including HGA's popular Small Expressions at the University of Tennessee Gallery. To enhance the experience of viewers, jurors' talks giving special insights on the featured works are scheduled for all of the HGA exhibits.

Panel sessions are included with both general registration and day passes. "Grants & Funding Opportunities for Learning & Teaching" will explore how artists fund their work and continued studies. In "HGA's Certificate of Excellence" session, panelists will share experiences with the process and answer questions about the program. "A Better Proposal—Tips for Being Hired to Teach" will provide insights on the class/teacher selection process and how to create a standout proposal. "The Handweavers of Modern-Day Southern Appalachia" will bring to life Cathryn Bergeman's graduate thesis about the living, breathing weaving community that still makes artistic and economic contributions to the southern Appalachian region.

The Marketplace will be abuzz for four days, Friday through Monday, as attendees shop for fiber art supplies and original handcrafted goods while enjoying shows and demonstrations. Three standout events include the Sheep to Shawl competition, where teams will compete to make a shawl step by step starting with washed fleece; the Shuttle Race, where decorative "shuttle craft" entries race each other down a track: and 15-minute Thread Talks that will inspire and delight.

On Saturday, July 16, emerging and established fiber artists are invited to participate in an Open Portfolio. This event is designed to provide constructive feedback for those looking to grow their skills while serving as a learning opportunity for observers. Three professional fiber artists will critique and discuss each participant's portfolio.

The core conference closes on Monday, July 18, with keynote speaker Kathleen Curtis Wilson. Kathleen is a nationally known writer, lecturer, and exhibitions curator in the field of Appalachian heritage, especially women's culture and craft traditions. After 25 years documenting handwoven textiles in southern Appalachia, Kathleen has a treasure trove of photographs and stories to share as she presents a visual tour of the talent and diversity of the strong, resilient men and women who settled in southern Appalachia.

After 25 years documenting handwoven textiles in southern Appalachia, Kathleen has a treasure trove of photographs and stories to share as she presents a visual tour of the talent and diversity of the strong, resilient men and women who settled in southern Appalachia.

We're excited for the opportunity to meet again at Convergence. HGA is working with local and regional partners to keep up to date on COVID-19 requirements and best practices and is making adjustments as needed. Attending Convergence is an individual decision, but everyone at HGA is excited for the opportunity to meet again as a community. More information on Convergence and any updates can be found at the HGA website, weavespindye.org.

SUZI BALLENGER is a New England weaver and educator who expresses her love of fiber through color and line. She currently serves as president of the board for HGA.



A Convergence attendee admires one of the featured works at the yardage exhibit.



Explore weave structures, color-and-weave, and more by weaving with paper.

Paper Weaving— Intriguing and Inspiring!

TOMMYE McCLURE SCANLIN



I'm going to walk you through just a few of the many paper-weaving techniques. If you find it intriguing and want to pursue paper weaving further, you can find inspiration and other techniques readily available on the internet. Currently on Instagram, there are over 22,000 entries for #paperweaving alone!

SUPPLIES

You need a few common crafting supplies to get started. Paper of almost any kind will work, but some types are easier to work with than others. Look for paper that is flexible and thin enough to make interweaving easy but sturdy enough to survive the manipulation it will go

through. Copy paper, cardstock, and scrapbooking papers work well and come in many colors. Look also for interesting images in magazines or junk mail, saved greeting cards, and printed or decorative papers.

Another option is to print photos on regular copy paper. For cutting, you'll need paper-cutting scissors; a ruler, either metal or with a metal edge; and a pencil or marker.

Although not necessary, a craft knife and cutting mat are useful, and a paper cutter is helpful for cutting lots of strips evenly and

quickly. Use cellophane tape or easy-to-remove painter's tape to hold your work steady. To preserve your woven pieces, a glue stick or PVA (polyvinyl acetate white glue) works well, or you can opt for a tape that is more permanent.

LEARN THE BASICS WITH PLAIN WEAVE

The simplest way to begin is with a single sheet of paper for the warp and one or more sheets of contrasting colors for the weft. Determine your warp's orientation and draw a margin line ½ inch to 1 inch from the top edge of the warp sheet. Starting from the bottom, cut up to the margin line to create warp strips. If you want the warp strips to be straight, measure and mark them before cutting, but freehand cutting also works, see Photo 1. Once you have cut the warp strips, temporarily tape down the top of the warp sheet to your work surface to keep it from shifting around as you weave.

Cut weft strips slightly longer than the width of the warp sheet so you can secure the edges with glue or tape later. For the weaving to show well, pick weft colors that are different from the warp. Weave the weft strips into the warp in plain-weave alternation, over one/under one across a row. For the next row, do the opposite: under one/over one all the way across. Slip the first weft strip up to the top margin and slide each new weft row up close to the last to make the weaving firm, see Photo 2. Be sure to keep the warp strips from drifting apart, side to side, as you near the bottom of the sheet.

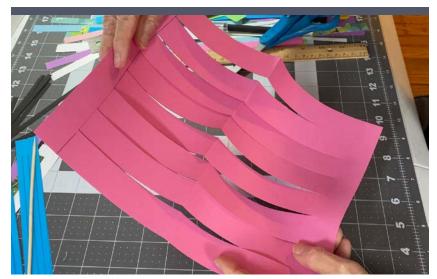
It's sometimes helpful to have a margin at both top and bottom edges of the warp sheet to prevent the warps from shifting. To prepare the



1. The simplest way to start is with one sheet for the warp and straight cuts.



2. Using weft strips slightly longer than the width of the warp paper, weave plain



3. By folding the warp paper in half, you can create borders at the top and bottom of your weaving.

warp sheet for this, fold it in half horizontally, bringing the top and bottom edges together. Measure and mark a margin across the edges that are opposite the fold. Starting at the fold, cut slits up to the marked line. Unfold the warp sheet and begin the weaving, see Photo 3. The final weft strip at the bottom margin can be a bit tricky to slip into place and might need to be cut just a bit thinner than the others to fit.

When finished, you can secure the weft strips by putting a bit of glue under them along the edges. You

could also turn the weaving over carefully and use cellophane tape along the sides to secure the strips, or glue the weaving to a background.

PLAIN-WEAVE VARIATIONS

One of the simplest variations is to cut warp strips or weft strips of different widths to create a more complex look. Other modifications include making openings in the weft and/or warp strips, possibly with a round or decorative punch, or using the craft knife to cut shapes within the strips.

Rather than cutting straight warp strips, cut curves or zigzags, running from the bottom to the top margin, see Photo 4. Keep the weft edges straight to make it easier to slip the strips close together as you weave.

Instead of one sheet of paper serving as warp, cut separate strips and tape them down onto a background sheet with a bit of painter's tape at the top. This allows you to arrange different colors of warp side by side. You might also vary the width of the warp strips as well as the wefts. See how easily you can create more possibilities with just a little modification in the process? Once you begin to change the warp and weft colors, you can experiment with random

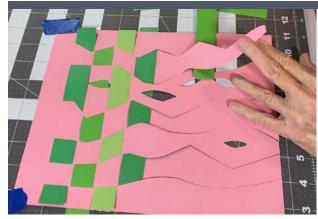
arrangements, or with planned color-and-weave patterns, see Photo 5.

Everything I've described heretofore using solid-colored papers can also be done with decorative and/or printed images. Weaving with printed and decorative papers results in more visual complexity. You can even selectively shape the warp strips in some areas to show more of the designs on the papers, see Photo 6.

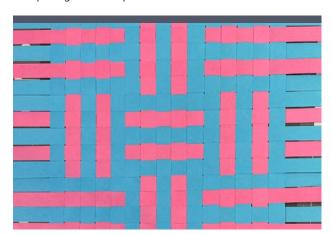
BEYOND PLAIN WEAVE

Why not take these ideas further by using other weave structures?
Weaving drafts from many sources can be used as the basis for paperwoven versions. As you explore

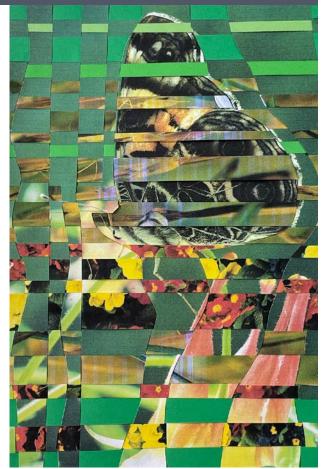
weaving drafts, you might want to make the warp and weft strips smaller so that the weave pattern shows more prominently. A simple way to do this is to use 1/4-inch grid paper for your warp. You can purchase grid paper or use free downloadable PDFs of grids or lines available from Kevin MacLeod's website, incompetech.com (see Resources). This allows you to plan your grid spacing and create vertical lines at intervals you'd like. Print custom grids or lines on regular copy paper or on cardstock and then cut along the lines with scissors or a craft knife. Alternatively, if you have a paper shredder that cuts long, narrow strips you might try



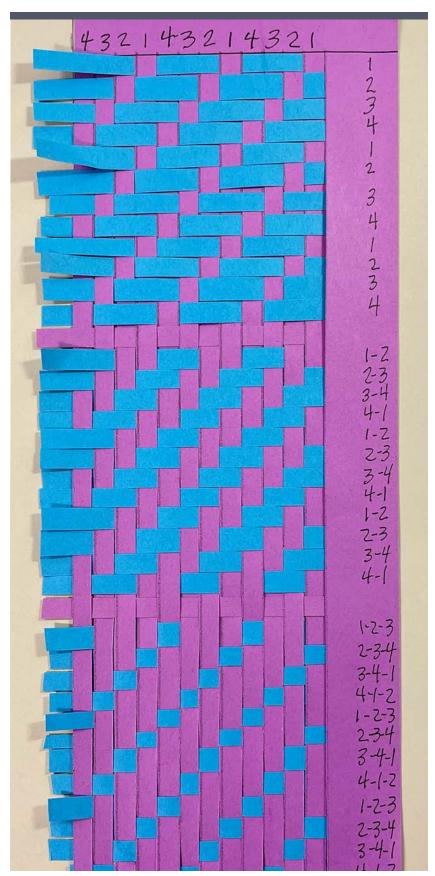
4. Feel free to cut the warp in different widths or shapes or cut openings in the strips to add drama.



5. Explore color-and-weave designs with contrasting paper colors.



6. Cutting curvy warp strips, in this case with printed papers, creates interesting effects. Note that the weft strips are straight.



7. Use paper weaving to grasp concepts of simple weave structures.

that for making warps and wefts, as suggested by Alison Irwin in her 2006 *Handwoven* post, "Weaving with Paper" (see Resources). For complicated weaves with narrow strips, you might find it helpful to use the tip of a bamboo skewer to help lift the warp strips.

Instead of threading warp through heddles on a loom in a particular order, number the top of the paper warp strips in the sequence you want. For instance, you can imitate a straight draw threaded on shafts 1, 2, 3, and 4 by simply numbering paper strips as 1, 2, 3, and 4 and repeating the sequence as you would on a loom. Turn the tie-up and treadling sections of the draft into a lift plan and weave using the weft strips according to the pattern you choose. Just as with the straight-draw threading on a four-shaft loom, plain weave will come from alternately weaving 1 and 3 across one row, then 2 and 4 across the following row. You can also do the equivalent of a rising shed (by lifting the selected warp strips) or a sinking shed (by going over the selected warp strips) in the chosen weave pattern.

The equivalent of four-shaft twills can be woven in paper in ratios of 1/3, 2/2, or 3/1 by using the numbered strips in any sequence as you pick, see Photo 7. For 1/3 twill, at the first weft row, you'll lift all strips numbered 1 and weave across to cover 2, 3, and 4; for the second weft row, lift all strips numbered 2; next, lift all 3s across; and finally, lift all strips numbered 4. Repeat the four-row sequence with as many rows of weft as you want for the pattern. You'll notice the diagonal twill line after one repeat, and it will become dominant the more times

you repeat the sequence. The weft shows more with this twill ratio since three adjacent warps are covered on each row.

If you want to weave 2/2 twill, lift all 1-2s on the first row, followed by 2-3s for the next row, 3-4s for the third row, and 4-1s for the fourth row; repeat this four-row sequence as far as you'd like. With this weave, warp and weft strips have equal or balanced roles.

Finally, 3/1 twill is done by lifting all 1-2-3s for the first row followed sequentially for the next three rows by 2-3-4, 3-4-1, and 4-1-2. Now more of the warps are dominant since three are up side by side in each row. For each of these twills, reversing the order at any point will change the direction of the twill line.

You're not limited to the equivalent of four shafts with paper weaving. You can also weave different twill ratios for multishaft weave structures by using the same concept: x warps up/x warps down. Thus, an eight-shaft twill in several varieties could be created. For example, for a 1/3/2/2 twill, there would be one warp up/three warps down/two warps up/two down. To set this up, number the warp strips from 1 to 8 and repeat for as many warps as you have. In the first row, lift warps 1-5-6; in the second row, lift warps 2-6-7, and so on, see Photo 8.

By numbering the strips at the top with the threading sequence of a desired draft and determining the lift plan you want to use, you'll have the freedom to create paper weavings from almost any threading draft you find. You can also create your own draft without worrying about whether it will be structurally sound as a piece of fabric; after all, you'll be using tape or glue to hold the warp and weft together, see Photo 9.

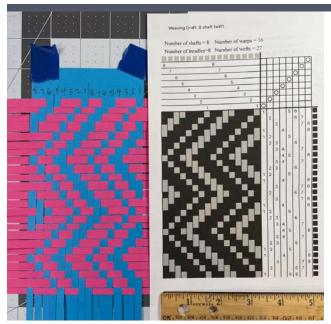
The versatility of this simple process is nearly endless. Your paper weavings can be artworks in their own right, perhaps showcasing special papers or images. In paper, weave structures that become large in scale can be easily modified as the weaving progresses. Paper weaving explorations can become inspirations for other weaving and fabric design ideas. So why not cut up some paper, begin today, and add your own paper-woven creations to #paperweaving!

RESOURCES

Incompetech. incompetech.com/graph paper/lined.

Irwin, Alison. "Weaving with Paper:
Off-Loom Color-and-Weave Coasters."
Handwoven, 2006, handwovenmagazine
.com/alison-irwin-paper-weaving.

TOMMYE MCCLURE SCANLIN is Professor Emerita at the University of North Georgia, Dahlonega, where she began the weaving program in the early 1970s. She is the author of The Nature of Things: Essays of a Tapestry Weaver and Tapestry Design Basics and Beyond: Planning and Weaving with Confidence.



8. Experiment with weave structures that use more than four shafts.



9. Long floats that may not be practical in a woven fabric pose no problems in paper weaving.





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Poppana shuttles don't use bobbins or quills; instead they feature wooden disks designed to hold spools of fabric strips.

Notes from the Fell: Poppana

BY TOM KNISELY



Susan E. Horton, editor of Handwoven, recently sent me a photo of an unusual-looking rug shuttle and asked me if I knew what it was. It reminded me of that game where you are shown a photo of an odd object and have to describe it. Other players then guess if you are telling the truth or making up a far-fetched story. This was indeed an odd-looking shuttle; it looked as if it had grown wings and was about to fly away with the flat, round disk that sits in the center portion. It was definitely a curiosity to behold. I remembered seeing this shuttle in a Toika loom catalog. The Finnish loom manufacturer makes these special shuttles to hold disks of bias-cut fabric known as poppana.

Susan knows that I love weaving with rags and suggested I read an article by Anja Höykinpuro on weaving with poppana in *Handwoven*, May/June 1997. That article

struck my rag-weaving nerve, and I just had to give poppana a try. I love a new weaving adventure, and the article got me excited. I ordered two of the shuttles for my initial test

run, figuring that I would want to weave a striped sample and wouldn't want to keep changing out the rag disks.

Keep in mind that at this point, I had no idea what I was doing when it came to weaving with poppana, which seems to be my normal MO. However, Anja Höykinpuro's article told me everything I needed to know to get started. I warped my loom with the recommended 12/6 cotton in a lovely navy blue with a sett of 10 ends per inch. The tightly twisted 12/6 cotton is strong and has a beautiful finish, although

because the fabric has a weft emphasis, I think you could easily get away with using a warp of 8/4 cotton carpet warp. I threaded for a sample that was 10 inches wide, so it could be used as a pot holder, and I used a straight-draw threading for plain weave. Now here comes the kicker, folks. You know that saying about putting your cart before the horse? Well, in typical Tom fashion, that is exactly what I did. I had the shuttles and the warp but finding the poppana bias-cut fabric strips proved to be a challenge.

I did a Google search and found a company called Color Crazy that sells poppana strips primarily for rug and locker hooking. I gave the company a call and learned that the poppana strips are cut to several sizes. I ordered the half-inch width in several colors to weave my samples. These bias-cut fabric strips come in cotton and a cotton/linen blend. Of course, I ordered some of each so that I could compare how they weave and finish. I fell in love right away.

Let me share with you what I learned about poppana strips: The fabric strips come as a tightly wound roll with a cardboard core to keep the roll from collapsing. Theresa from Color Crazy explained that she chooses special fabrics to be wound like a bolt of fabric on a cardboard tube. The rolls of fabric are then cut on the bias with special fabric saws that resemble band saws. This results in narrow disks of 60-yard poppana fabric strips.

The shuttle I described, with the flat wooden disk, is very different from any other rug shuttle that I have ever used. The disk slides in and out of the side of the shuttle and is held in place with simple friction. In the center of

the disk is a round piece of wood that holds the cardboard core of the prewound poppana strip. It is also what holds the disk in place when you push the round of rags into the shuttle.

The shuttle I described, with the flat wooden disk, is very different from any other rug shuttle that I have ever used. The disk slides in and out of the side of the shuttle and is held in place with simple friction.

I didn't think about how the wide, flat disk of the shuttle could be a problem when passing it through the shed. I had already threaded and beamed my sample warp on a portable floor loom. Hindsight tells me it would have been easier to weave on a loom with an overhanging beater that would have given me a longer weaving distance between the reed

and the fell line. That said, the sample wove just fine. I had to advance the warp frequently because the thickness of the rag strips makes weaving go quickly. As soon as I heard the wooden disk touch the reed when it entered the shed, I knew it was time to advance the warp. I didn't want to risk scraping the reed with the shuttle and perhaps bending the teeth.

I found that tapering the strips and making overlapping joins from one strip to another made the joins undetectable. I also did this at the selvedge edge when I was changing from one color to another. I wrapped the tapered end around the last warp end and tucked that end into the same shed before beating it. Introducing the next color was just the same. In the new shed, I threw the shuttle across, leaving about 3 inches of the rag sticking out from the edge, and beat the weft into place. I then wrapped the tapered rag end back



The width of the poppana disk dictates that you keep the fell line far enough from the reed to allow the shuttle enough room in the shed to pass.



Tom's poppana sample

into the same open shed and beat it into place.

Before starting, I thought about the finishing. I didn't want fringe on my sample, so I wove a small hem in navy blue 8/4 cotton warp on each end to be turned and sewn down.

After the hems were sewn and secured, I machine washed the sample on a regular cycle with hot water and a cold rinse. When the wash had finished and while the sample was still damp, I brushed the surface with a soft-bristle nylon hairbrush to bring up a nap with a chenillelike surface.

The sample feels wonderful in my hand. The fabric is firm and sturdy and would make a wonderful rug. It could also be used for coasters, placemats, or runners. I want to continue to work with these poppana strips in structures other than plain weave. I plan to weave the poppana strips in krokbragd and boundweave or other weft-faced structures. I believe they would make a great filler weft for rep weave as well.

I am sorry that I didn't pay closer attention to how much poppana I used for my sampling. I just jumped right in to see how it wove. Really, don't judge-isn't that often the way it goes? I will pay closer attention next time and order enough to cover a larger project. Who couldn't use a few extra rolls of rags in their stash anyway?

I am fascinated and excited about what I have learned about weaving with poppana, and I bet you will be also. There is so much you can do with these crazy little fabric strips. The possibilities are endless.

Happy weaving. ◆■● Tom

RESOURCES

Höykinpuro, Anja. "Weaving with Poppana." Handwoven, May/June 1997, 38-39, 76-77.

TOM KNISELY enjoys weaving and spinning and teaches weaving at Red Stone Glen Fiber Arts Studio. He also loves sharing his thoughts here in Handwoven.



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If the edges of your fabric turn up in a smile, you are not giving each pick enough weft and your fabric is drawing in, which in turn will cause ends to break.

Best Practices

Fixing Mistakes

BY SUSAN BATEMAN AND MELISSA PARSONS



No one's perfect, so knowing how to fix mistakes is an important component of weaving. We covered fixing mistakes before starting to weave in our previous article; this article will address how to fix errors while weaving and off the loom.

THREADING ERRORS

No matter how careful you are, threading mistakes happen, and sometimes they aren't visible until you start weaving. Weave your first repeat or, if the repeat is long, weave about 2 inches. Stand up and view the weaving from farther back as well as from the side. Look for interruptions in the pattern. If something doesn't look quite right, check it out.

At this early stage, if you spot errors, unweave, correct, and start again. While it seems like the fastest way to unweave is to simply open the shed and yank the yarn out, it is better to first pull the weft pick toward the reed, releasing it from the grip of the warp. Doing so prevents fibers from the removed yarn building up within the shed and locking the warp ends together. If you are using a sticky yarn, releasing it from

the grip of the warp is especially important. If your weft isn't pricey and you have enough of it to spare, you can also carefully cut out the weft using a pair of small, sharp scissors. Then use a blunt needle to pull the weft threads out of the warp one by one.

As we described in the previous Best Practices article in March/April 2022, repair heddles make correcting threading errors easier. You can simply snap on or tie a repair heddle in the right location and thread it. This works if it is a single warp end that has been threaded incorrectly. If a whole section has

been threaded incorrectly, you may need to rethread the entire section.

TENSION ISSUES

As you weave, individual warp ends that seemed taut when you started may begin to sag. Sagging is common with floating selvedges. The fix is easy—simply weight the ends. You can buy weights for warp ends or improvise using paper clips, spoons, empty cones, or other household items, hanging the weights over and behind the warp beam.

Draw-in can also cause tension problems. Pulling the weft too tightly at the edges can make the selvedges warpfaced, in turn stressing and fraying the warp ends. If your weaving is smiling at you, you are drawing in too much. Allow more length on each weft pick by making your weft bubble larger. Try beating on an open shed, which lets the fabric itself determine how much length it needs in each pick. (Throw the shuttle, beat, change sheds.)

Some structures may cause tension problems that increase as you weave. For example, in the napkins pictured at lower right, the spots of basketweave in an overall plainweave fabric created areas of loose tension because there was less takeup than in the plain-weave areas. In this case, a second warp beam would have been helpful, or weighting the basketweave sections separately from the plain-weave sections at the start. You don't have to live with these tension issues—improvising weights for warp sections, as we did below, just takes a little creativity.

Uneven tension is the most common cause of broken warp ends. When this happens, cut a length of the warp yarn several feet longer than the estimated remaining warp length. Locate the broken end's heddle and dent in the reed and pull the new warp end through them. Pull the broken end out of the warp at the back of the loom. Trim off as

much as you can reach. Keep an eye on this end as you continue weaving to keep the loose broken end from tangling with other warp ends. At the fell line, poke the broken end down under the fabric surface. Using a tapestry needle, weave the replacement end into the fabric from the fell line, following the broken end's path for about an inch. Bring the repair warp end up out of the fabric. Insert a T-pin into the fabric where the needle came out and then bring the T-pin tip up to the surface to the side, not directly below the insertion point. (You want to be able to advance the warp and roll the pin over the breast beam without stabbing yourself!) As shown in the photos on the next page, wrap the replacement end around the T-pin in a figure-eight. At the back of the loom, beyond the back beam, weight the repair end so that the tension on it equals the tension on the other warp ends. Don't overweight the end, as this can cause a second break.



Tension problems caused by uneven take-up can be remedied. Warp-thread weights can be purchased or created from household items. Here we used paper clips and tubes of yarn for improvised weights.



Some structures can cause tension problems, as shown here.



Weave the repair end into the fabric following the path of the original warp end, secure it with a T-pin, and weight it over the back beam. The repair end shown here is in a contrasting color for visibility.



In this photo, you can see the effect of two different beats. Be sure you are beating at the correct sett for your design and beat as consistently as you can.

TREADLING AND BEAT ERRORS

A good way to catch a treadling error is to stand up and look at the weaving before advancing the warp. In the same way that you looked for an interruption in the pattern in the warp, here you are checking for an interruption in the weft pattern. Catching the mistake early means less unweaving and reweaving.

To prevent treadling mistakes, if possible, find a way to break up complex sequences into units that can be remembered. For example, if an overshot treadling sequence is 1-2-3-4-3-3-3-4-4-3-3-4-3-2-1-4-4-1-1-4-4-1-1-4-4, break the sequence up into something like this: 1-2-3-4/

3-3-3-4-4-3-3-3/4-3-2-1/4-4-1-1-4-4-1-1-4-4. You can memorize the smaller units, plus the more often you repeat the sequence, the easier it will be. For some treadlings, you can set up your tie-up so that the direction of the shuttle tells you which treadle you should be using. For instance, you can put the even tabby tie-up on a treadle on one side of your loom, the odd tabby tie-up on other, and then start your tabby weaving from the side that corresponds to the treadle you are using.

Some structures or drafts require a certain beat to create a motif with specific proportions or to give the fabric the correct hand. If you are working from a pattern, the beat will be stated. Overbeating can mean a compressed design, stiff fabric, and/or running out of weft. Underbeating can make an elongated design and flimsy fabric, plus the risk of running out of warp length before the design is complete. Regularly checking your picks per inch with a ruler helps to keep your beat consistent.

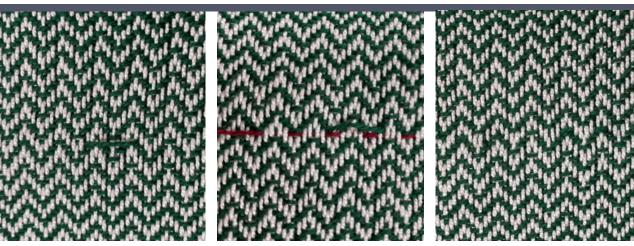
To count, release the warp tension slightly and then count the number of picks within an inch. If the yarn is fine or textured, it can be easier to measure a repeat of the treadling sequence and then divide the number of picks in a repeat by the length of the repeat. For example, if a repeat of the overshot pattern Blooming Leaf has 33 pattern picks and your repeat measures 2.75 inches, then you are beating it at 12 pattern picks per inch (33 divided by 2.75). If that beat doesn't give the look you want, unweave and reweave.

Occasional modulations can even out with washing, depending on the fabric, but big changes should be corrected before you continue weaving. If, even before you begin a project, you're worried about keeping a consistent beat, add extra warp. Then you can sample to figure out your beat without having to unweave and reweave.

FIXING ERRORS OFF-LOOM

Even if you are careful, you might find that some errors get past you and are discovered only after the fabric is off the loom. Often, they are fixable—or at least improvable.

To fix a skip caused by sticky threads or uneven tension, cut a length of the weft yarn and thread it on a tapestry needle. Starting an inch from the skip, follow the path of the weft pick, going over and under warp



A skip can be corrected by weaving in a replacement yarn (shown here in a contrasting color for visibility).

When the skip repair is done in a matching color, the fix is almost invisible.

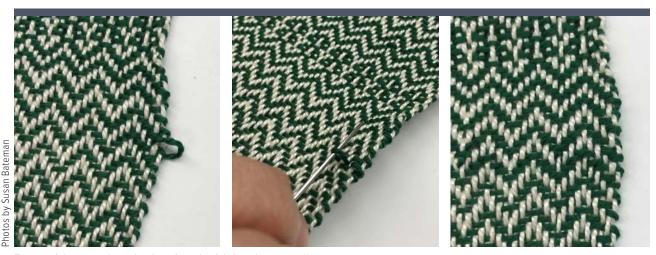
ends wherever it does, weaving in a splice. When you get to the skip, weave the path that the pick *should* have taken and then continue weaving along with it for another inch (see photos above). Trim off the tails and then cut off the skip itself. For long warp skips due to slack warp ends, you can use the same method of splicing in a warp replacement to fix errors. For a loose loop at the selvedge, ease the slack back into the fabric, tugging the weft picks leading to and from the loop (see photos below).

Finally, wet-finishing causes the warp and weft to relax and shrink. Different structures affect the amount of draw-in, and take-up which in turn can cause rippling or buckling in the body of the fabric or selvedges that curve in and out. Blocking can reduce these problems. For delicate items, use a blocking board or other surface that can be pinned into. Stretch the dampened piece to the shape and dimensions desired. Pin it in place and allow it to dry. For something like a rug, just stretching it in your hands (or with help from someone else) while the fabric is damp may be all the reshaping it needs.

Fixing mistakes isn't a sign of failure. It is just a part of the weaving process—plus, it helps you learn what to watch for on your next project.

SUSAN BATEMAN, weaver and teacher, started Yarn Barn 50 years ago. Her hobbies include weaving, working on the farm, volleyball, and bridge.

MELISSA PARSONS has been weaving since 1988. She started working with Susan Bateman at the Yarn Barn in 1992.



Ease weft loops at the selvedges into the fabric using a needle.



Deb wove this scarf as a sample for one of her kits and had it professionally photographed.

Selling Your Handwovens

BY DEB ESSEN



In the March/April 2022 issue, I wrote about pricing handwoven items for sale. The next logical question is "How do we sell our pieces?" Although it's nice to think handwoven pieces will sell themselves, in the era of cheaply made, inexpensive textiles, we need to be able to explain why handwovens are worth the price, and that involves selling. I know, I know, you are probably saying, "I'm not a salesperson, I'm a weaver!" Being a weaver is our superpower. Selling can feel a bit like our kryptonite.

Selling your handwovens starts by answering who, what, where, when, why, and how. Start with asking *why* you want to sell your handwovens. Your answer to why affects who, what, where, when, and how.

If your answer is "I love to weave, and selling some items would help

support my habit," you are in good company. This is the number one reason weavers decide to sell their pieces. For many, your guild's annual sale is the "where." However, it can be difficult to highlight your pieces in the sea of possibilities at a guild sale. A better "where" could be

hosting your own studio sale or teaming up with two or three fellow weavers to hold a studio show together. The "when" would depend on where you live: think about weather, seasonal tourism, snowbirds (arriving and leaving), holidays, community celebrations, and local art events.

If your answer to why is "I'm ready to create a weaving business," the "where" expands. Will you be willing and able to travel to shows and, if so, how often? Are you able to create sufficient inventory for a two- to three-day show, or is joining



This is the same scarf that is shown on the previous page, but this time Deb attempted to photograph it herself. Can you see the difference in quality?

a local artist co-op a better fit? Do you want to sell online with a website or on shopping sites such as Etsy or Artful Home?

No matter what your answer is to "why," you need to think seriously about to whom your pieces would appeal (men, women, children, etc.), keeping in mind that women are the primary gift-buying demographic. The "what" to sell is based on the "who."

Now that you've thought about who, where, when, and why, let's talk a bit more about what you will sell and how you will sell your pieces, regardless of setting or type of customer.

First, consider what you will sell. To maximize your customer base,

you should have products that fall within a range of prices, from inexpensive (note that I don't say "cheap" or "small") to midrange and high-end. Your least expensive items are what we called "coffee cups" when I taught at the Montana Artrepreneurship Program. These are entry-level items that people who like your work will purchase without too much thought about expense. Mug rugs, holiday ornaments, individual napkins, bookmarks, and hot pads come to mind.

Examples of midrange items could be towels, placemats, and table runners. Placemats can be sold individually or in sets (options are good). Offer table runners in various lengths. If you plan a warp width that works for both runners and placemats, weave several placemats and then a couple of table runners, thus getting a range of different products from the same warp. If you put on a warp for 10 towels, weave with different colors or change your treadling to maximize variety from one warp instead of weaving 10 identical towels. Vary your prices based on weave structure and the amount of varn used. Plaid towels take longer to weave (thus should be a bit more expensive) than striped towels, but both can be woven on the same warp. Rep-weave placemats take a great deal more yarn and time to dress the loom but weave up more quickly than plainweave placemats. Overshot, summer and winter, and other two-shuttle weave structures will take more yarn and time and should be priced higher, so be ready to explain that nuance to vour customers.

Scarves tend to fall in the medium to high price range depending on the yarns and fibers used, scarf length, and weave structure. Infinity scarves are popular—their shorter length makes them faster to weave than standard scarves, and they require less yarn so they can often

Customers always ask how long it takes to weave an item because people equate time with money, and your customer is trying to figure out why you've priced your items a certain way.

be offered at a lower price point. Using bulky knitting yarns can speed up the weaving process, but you may incur higher yarn costs using knitting yarns versus weaving



This particular scarf was woven with Jagger Spun Zephyr wool/silk blend and a custom spun merino wool/wolf down yarn (the gray), which is not something commonly found at the local yarn shop. As a result, this wolf-down scarf was priced higher than Deb's other scarves. Deb also did a special display with a picture of the wolf and her story next to the scarf to highlight what made the piece so remarkable and give it more context.

yarns. Large pieces, such as baby wraps, shawls, blankets, jackets, and vests, or items woven with expensive fibers (bison, silk, yak, etc.) or handpainted yarns will fall into your high-end price range.

Now let's talk about how to sell handwoven pieces. Selling is not slapping a price on an item and then hoping someone will buy it. Selling is educating your customers. The easiest sales are to customers with weaving experience. They know how much time, effort, and practice it takes to create a handwoven piece. Unfortunately, most non-weavers do not understand the amount of work it takes to weave a towel, so it's up to you to give them an idea of what is involved. Have someone take a series of pictures of

you preparing the loom: winding the warp, threading the heddles, weaving, and so on. Display these pictures in your booth (or on your website) with brief explanations of what each step involves. Some artists do a short video of their process and play it on a digital picture frame in the booth or post it on their website. Do whatever works for you.

Customers always ask how long it takes to weave an item because people equate time with money, and your customer is trying to figure out why you've priced your items a certain way. Never tell them "25 years of practice" (which comes off as snarky and rude). Instead, try starting the conversation with "it depends"—because it does! Explain what fibers

and how many warp ends are in the item. Describe how each end gets measured and then individually threaded on your loom (this is where those process photos come in handy) and how each weft thread is placed individually. It's about helping your customer understand, and therefore better appreciate, the work involved. I use this selling technique all the time, and honestly, I have never had anyone ask again about the exact amount of time. I have had them exclaim, "You are selling these too cheaply!" while holding a \$250 scarf. If you are selling on the internet, this same process information should be on the website.

The huge advantage of selling in person is the customer can see, feel, and, when applicable, try on the piece. Selling over the internet eliminates the need to travel because you can sell to anyone, anywhere. However, to sell online, you must have fantastic photos of the individual pieces with detailed descriptions of size, fiber, and weave structure. Photograph your pieces against a neutral background without clutter and make sure the items are well lit and in focus. Good photographs are the difference between selling and not selling. If you are planning to sell on the internet and you are not skilled at photography, pay a professional to photograph your pieces.

In a nutshell, that's the who, what, where, when, why, and how of selling. Now it's just a matter of practicing!

DEB ESSEN weaves, teaches, and creates kits for handweavers for her business dje handwovens in the beautiful Rocky Mountains of Montana.



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Left: Bedford seersucker before and after wet-finishing; Right: Indigo-dyed Bedford seersucker

Sampling for Bedford Seersucker

by Janet Phillips

Structurally, distortion and deflection occur in cloth if there are areas of plain weave adjacent to areas of floating ends and/or picks. Two structures in which this happens are huck lace and waffle weave.

Weft Bedford cord falls into the same category. This structure consists of horizontal stripes of plain weave with floating ends hanging behind them. The threading repeats every four ends in a classic straightdraw threading.

Two adjacent ends weave plain weave with the weft, while two ends just float on the back without

interlacing with the weft. After a half inch or so of weaving, the four ends meet to weave two picks of plain weave. Then the ends that were floating on the back turn to weaving the plain-weave face of the next cord, while the other two ends are allowed to hang idly on the back of the cloth.

The distortion occurs during wet-finishing. The tightly woven plain-weave bands cannot shrink as much as the ends hanging on the back of the cloth. As these long floating ends shrink, they force the plain-weave stripes to rise into rounded cords.

In the four-shaft Colour and Weave Effect Sample Blanket from my book Exploring Woven Fabrics, Wefting 39 (Photo 1) is woven as a classic weft Bedford cord with a cotton warp and weft. Wefting 40, is the same cord, but for that sample, I changed the color of every 10th end to a blue cotton thread. These

STRUCTURE

Weft Bedford cord.

EQUIPMENT

4-shaft loom, 19" weaving width; 10-dent reed; 3 shuttles.

YARNS

Warp: 16/2 cotton (6,720 yd/lb), natural white, 607 yd; bleached white, 600 yd. 2/24 WC wool (7,000 yd/lb), white, 107 yd.

Weft: 16/2 cotton, natural white and bleached white, 130 yd each. 2/24 WC wool, white, 52 yd.

Note: 2/24 WC wool is not available in the United States. A close substitute is Maine Line 2/20 (100% wool; 5,600 yd/lb; Jagger Spun). It is available from various retailers in 53 colorways. Please sample for sett and shrinkage.

OTHER SUPPLIES

Indigo dye; pouch sewing pattern and sewing supplies.

WARP LENGTH

728 ends 60" long (includes doubled floating selvedges; allows 3" for take-up; 29" for loom waste).

SETTS

Warp: 40 epi (4/dent in a 10-dent reed). Weft: 20 ppi.

DIMENSIONS

Width in the reed: 183/10". Woven length: (measured under tension on the loom) 28". Finished size: (after wetfinishing) 151/2" × 20". Fabric was sewn into the pictured lined pouch.

blue ends showed as squiggles of color on alternate cords after the cloth was washed (Photo 2).

I began thinking about what would happen if those blue ends were wool instead of cotton. Would they add more texture to the cords, as the wool ends would shrink more than the cotton ends? With this in mind, I sampled further, eventually producing Bedford seersucker.

The main warp is a fine 16/2 cotton. I used natural and bleached cotton to create a subtle check over the whole cloth. Between every 20 ends of cotton, I placed 2 ends of 2/24 worsted wool (see the warp color order, Figure 1). I threaded a straight draw on four shafts across the entire warp (see Figure 2). I wove using a classic weft Bedford cord treadling with 10 cotton picks per cord separated by 2 plain-weave picks, using the same wool as in the warp.

On the loom, the cloth looked very bland (Photo 3), and the back even more so (Photo 4), but after washing in hot, sudsy water for about 15 minutes, the natural shrinking of the cotton caused the cords to rise, while the additional fulling of the wool ends created overall texture as shown at the top of the preceding page on the left.



Photo 1. Wefting 39



Photo 2. Wefting 40



Photo 3. Fabric on the loom

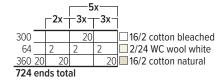


Photo 4. Back of fabric

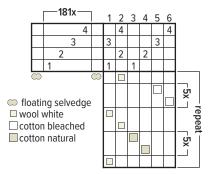


Photo 5. Boxed pouch

1. WARP COLOR ORDER



2. DRAFT



I decided to dye the whole cloth in an indigo dyebath. The dyed wool was a slightly deeper color than the cotton. The natural and bleached cotton also took the blue dye differently (see photo at top right of page 32). And finally, I sewed the finished fabric into a boxed pouch (Photo 5).

Weft Bedford cord is a very simple structure that is easy to weave. I would encourage you to weave a small sample with any yarns you have in your stash to learn about its construction and see how you could develop your own designs and ideas using it.

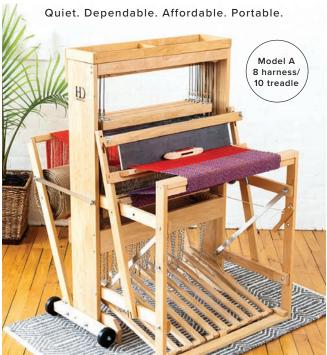
RESOURCES

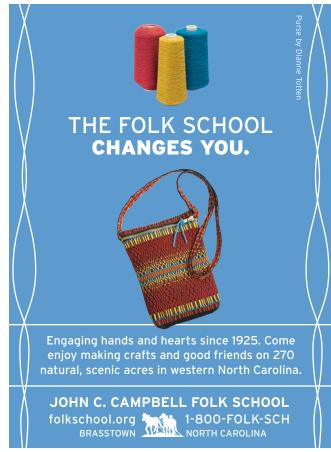
Phillips, Janet. *Exploring Woven Fabrics*. Somerset, UK: Natural Time Out Publications, 2020, 27, 44–45.

JANET PHILLIPS has been weaving for over 40 years. She is a teacher, fabric designer, and the author of two books about weave structures and fabric design: Designing Woven Fabrics and Exploring Woven Fabrics. Visit her website janetphillips-weaving.co.uk.



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Vakker Mug Rugs

ANU BHATIA



STRUCTURE

Krokbragd.

EQUIPMENT

3-shaft loom, 7" weaving width; 12-dent reed; 4 shuttles.

YARNS

Warp: 8/4 poly cotton carpet warp (50% polyester/ 50% cotton; 1,600 yd/lb; Great Northern Weaving), Barn Red. 138 vd.

Weft: Zephyr 4/8 worsted (50% merino wool/50% tussah silk; 1,120 yd/lb; 248 yd/100 g; Jagger Spun), Ebony, 75 yd; Cinnabar, 70 yd; Curry, 64 yd; Marine Blue, 35 yd. 8/4 poly cotton carpet warp, Barn Red, 8 yd.

OTHER SUPPLIES

Tapestry needle; 2" x 8" cardboard strips for creating spaces between pieces for fringe.

WARP LENGTH

39 working ends (61 ends total) 21/4 yd long (includes doubled floating selvedges; allows 3" for take-up and 36" for sampling and loom waste; loom waste includes fringe on the ends).

SETTS

Warp: 6 epi (1-0 per dent in a 12-dent reed). Weft: about 52 ppi.

DIMENSIONS

Width in the reed: 61/12". Woven length: (measured under tension on the loom) 42" (includes fringe allowances between pieces). Finished size: four mug rugs, $5\frac{1}{2}$ " × 6" with 11/4" fringe.

Beautiful ... vibrant ... so elegant! That's how my friends reacted when I showed them my finished mug rugs! I looked online for the Norwegian word for these descriptors. Vakker is one of the Norwegian words to describe a beautiful object (as per various translators).

Traditionally woven in Norway, krokbragd is a three-point polychrome weft-faced twill structure. The term krokbragd refers to the crooked lines created by rhythmic treadling passes in vibrant color sequences. It is considered a close cousin of Swedish boundweave woven on four-shaft rosepath or point-twill threadings. Krokbragd is used widely to make rugs and warm blankets. Its warp is usually cotton, poly cotton, or linen sett fairly open in the reed, so a thicker wool or wool-blend weft covers it completely and the warp shows only in the fringes.

By treadling the same three-pick sequence over and over but changing the color order within the sequence, the krokbragd structure combined with a wide warp sett creates geometric designs. As you weave, each of the three picks lifts a different set of two shafts leaving a third shaft down. Within each sequence, the weft yarns slide under and over each other such that three picks equal one complete row and create the characteristic crooked lines on the surface. Weaving krokbragd is intriguing; as you work, the designs build vertically on the loom.

lackl Wind a warp of 61 ends 21/4 yd long of 8/4 carpet warp. This includes 4 ends to be used as doubled floating selvedges on each side. Warp the loom using your preferred method following the draft in Figure 1. Note that the ends on shaft 1 at the

Notes on structure

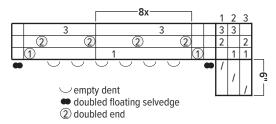
Krokbragd is considered a slow weave, and there are several reasons why:

- · As a weft-faced structure, the number of picks per inch is very high. For instance, it takes about 312 picks (about 52 picks per inch) to weave each of these 6" mug rugs.
- Frequent color changes and the use of multiple colors in one row each of which comprises three picks slows an otherwise simple treadling. Each row can have one to three colors depending on the pattern.
- · Krokbragd requires special attention at the selvedges to keep the edges neat.

selvedges and all ends on shaft 2 are doubled. Centering for a weaving width of 61/12", sley 1 working end per dent in a 12-dent reed, leaving empty dents between ends except near the edges; sley the 2 doubled working ends on shafts 1 and 2 and the floating selvedges in dents next to each other at both edges.

| Total | 37 |
|---------|----|
| Shaft 1 | 10 |
| Shaft 2 | 18 |
| Shaft 3 | 9 |

1.DRAFT



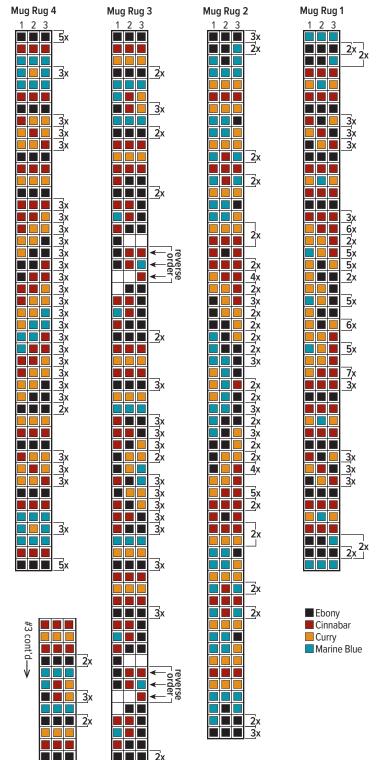
Leave an empty dent between ends when sleying, except at edges sley the floating selvedges and doubled edge ends next to each other.

Note: Reverse treadling order where indicated in weft color order for Mug Rug #3, i.e., treadle 3, 2, 1 for those rows.

2 Wind bobbins with each of the weft colors. Spread the warp with scrap yarn. Anu recommends sampling for a few inches before starting the project to get the rhythm of the treadling and an appropriate beat. After sampling but before starting your first mug rug, advance your warp and insert cardboard strips to allow 4" of unwoven warp for fringe. Note: Cardboard spacers can be removed and reinserted as necessary as you work.

 $oldsymbol{3}$ Twining: Measure two 1 yd lengths of 8/4 carpet warp for twining on both ends of each mug rug. Add a row of twining by working right to left and then double it by working left to right (see Resources) to give a chainstitch-like effect. Secure the twining with a square knot. Tuck the loose ends in along the selvedge or leave them to be tied into the fringes later.

2.WEFT COLOR ORDER



4 Weave following the weft color order in Figure 2 for mug rug #1 for about 6". Beat firmly to cover the warp completely but do not use excessive force. Note: Krokbragd's treadling order is 1-2-3 but there can be exceptions; Anu reversed the treadling order for the offset flower rows in mug rug #3, switching the pick order to 3-2-1. Tuck your weft tails into the same shed they are woven into. Tucking them into another shed will show on the cloth. After tucking them in, push the weft tails below the weaving to be sewn in later. When you have completed the treadling for the first mug rug, add twining as you did at the beginning.

5 Advance your warp and insert cardboard spacers to create a gap of at least 6" of unwoven warp between mug rugs. Weave the three other mug rugs as you did the first, following the weft color orders in Figure 2.

6 Cut the fabric from the loom and cut the mug rugs apart. Using a tapestry needle, weave all weft tails into the back in a warpwise direction.

7 Finish fringes in groups of 3 (one group will have 4 ends) by tying an overhand knot close to the edge. Trim the fringe ends to 11/4".

8 Place a damp towel on each mug rug and steam-press. Anu recommends delicate handwashing for future cleaning.

KROKBRAGD WEAVING TIPS

Krokbragd's treadling is straightforward, but managing colors on the selvedges requires attention. The warp's threading starts and ends on shaft 1, so selvedges should only show the color passing over ends on shaft 1, which is the lowered shaft on treadle 1. Here are some pointers to weave neat and tidy selvedges for these mug rugs:

1 If the color used in the first pick of the sequence is also used in one of the other two picks, bring that weft color over the floating selvedge as you enter the shed

and bring it under the other floating selvedge as you exit the shed. Do this for both picks of that color. Bring the shuttle with the other color under both floating selvedges as it enters and exits the shed.

2 If the color used in the first pick is only used once in the sequence, again bring it over and then under the floating selvedges. Bring the other two shuttles under both floating selvedges. To cover the gap, wrap the color used in the first pick around the floating selvedge twice.

RESOURCES

Collingwood, Peter. The Techniques of Rug Weaving. New York: Watson-Guptill Publications, 1972, 476. Greenlaw, Debbie. Krokbragd: How to

Design & Weave. San Bernardino, CA: self-published, 2019.

Horton, Susan E. "Team Colors Weavealong, Finishing Tips and Techniques You'll Want to Know" Handwoven, December 26, 2018. handwoven magazine.com/team-colors-weavealong-finishing-tips-and

-techniques-youll-want-to-know. Hoskins, Nancy Arthur. Weft-Faced Pattern Weaves: Tabby to Taqueté. Atglen, PA: Schiffer Publishing, 2011. Patrick, Jane. "Krokbragd: Pattern in Twill on Only Three Shafts." Handwoven, March/April 2001, 64-66.

Simplifying her life during the pandemic, ANU BHATIA turned to researching and learning historically rooted simpler weave structures. Mastering colorful Scandinavian weaves is her newfound passion.





Wall of Troy Fade Napkins

CHRISTINE JABLONSKI



STRUCTURE

Twill.

EQUIPMENT

4-shaft loom, 20" weaving width; 12-dent reed; 2 shuttles.

YARNS

Warp: Italian Cotton/Linen (50% cotton/50% linen: 2,600 yd/lb; Gist Yarn), Lavender and Clementine,

Weft: Italian Cotton/Linen, Lavender and Clementine, 637 yd each.

OTHER EQUIPMENT OR SUPPLIES

Sewing machine or Fray Check.

WARP LENGTH

464 ends 31/2 vd long (includes floating selvedges; allows 9" for takeup, 27" for loom waste).

Warp: 24 epi (2/dent in a 12-dent reed). Weft: 24 ppi.

DIMENSIONS

Width in the reed: 195/12". Woven length: (measured under tension on the loom) 90". Finished size: (after wetfinishing and hemming) four napkins, 17" × 171/2" each.

When this issue's call for submissions was published, I admit I gave it a bit of side-eye. I had been weaving a lot of twill, experimenting with one threading and multiple treadlings as well as asymmetrical warp color blocks—combinations that produced some beautiful pieces but lacked something. My experiments didn't quite achieve what I was intending. Not that I knew what I was intending, but I knew I'd recognize it when I saw it.

I paged through Marguerite Porter Davison's "green book" for what seemed the millionth time and lingered over the Wall of Troy draft. The draft had the active design element I realized I had been reaching for in my most recent twill projects. Wall of Troy also struck me as one of those classic patterns that could be fascinating with some contemporary colorplay. I had been working with ombré for well over a year but had confined the color shifts to the warp. What if I mirrored the color shift in the weft as well?

Figuring out the math of how to sequence the colors to get a squarish napkin was no small feat. Be aware that the threading is most definitely a post-coffee and pre-wine activity, but the results are worth it. The grid formed by the interlocking colors presents the Wall of Troy motif in bite-sized pieces, injecting the design with a lot of movement and a little bit of mystery as the pattern emerges and fades from view.

f I Wind a warp of 462 ends 3½ yd long following the warp color order in Figure 1. Wind 1 additional end of each color to be used as floating selvedges and set them aside. Warp the loom using your preferred method following the draft in Figure 2. Centering for a weaving width of 195/12", sley 2 per dent in a 12-dent reed. Sley the floating selvedges

Notes on keeping your place

When designing and weaving this project, Christine thought of the warp and weft as 22-thread blocks. One color decreases by 1 thread while the other increases by 1 thread, always maintaining that 22-thread block.

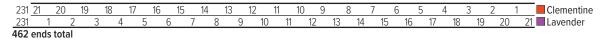
through the empty dents on each side of the warp, making sure to match the edge color, and weight them over the back beam.

f 2 Wind bobbins with each of the weft colors. Spread the warp with scrap yarn.

3 Following the draft in Figure 2 and the weft color order in Figure 3, weave four napkins, each with about 11/2" or desired length for hems and 191/4" in pattern. Weave a few picks of scrap yarn between napkins and when finished weaving.

4 Remove the fabric from the loom. Zigzag the ends of the napkins and cut apart at scrap yarn markers, or run a line of Fray Check along the ends of the napkins after wet-finishing but before cutting apart.

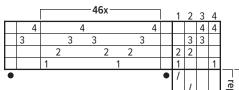
1. WARP COLOR ORDER



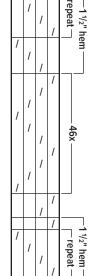
HEDDLE COUNT

| Total | 462 |
|---------|-----|
| Shaft 1 | 92 |
| Shaft 2 | 138 |
| Shaft 3 | 139 |
| Shaft 4 | 93 |

2. DRAFT



floating selvedge





WEAVING NOTES

For the hems, Christine used the opposite of the adjacent pattern color, and she used a straight treadling sequence as opposed to the pattern sequence. She loved this pattern and color

combination so much she wanted the hems to have their own special details. The hems are also longer than most people weave them-Christine likes a generous hem!

 ${f 5}$ Wet-finish by machine washing in cold water on the delicate cycle. Tumble dry on low or line-dry.

6 Fold and press the hems under twice. Pin the hems in place and stitch by hand or machine.

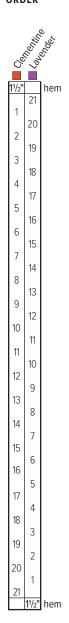
RESOURCES

Davison, Marguerite Porter. A Handweaver's Pattern Book, 16th printing. Chester, PA: John Spencer, 1975, Wall of Troy, 34.

Selby, Margo. Color and Texture in Weaving. Loveland, CO: Interweave, 2011.

CHRISTINE JABLONSKI is the director of channel development and customer experience at Gist Yarn. She is on Etsy and Instagram as SoulSpaceArt and writes about weaving and life on Substack in her monthly column, SoulSpace Notes.

3. WEFT COLOR ORDER



A Basket of Stripes

MEGAN M. MACBRIDE



STRUCTURE

Twill and basketweave.

EQUIPMENT

8-shaft loom, 21" weaving width; 12-dent reed; 2 shuttles; 3 bobbins.

YARNS

Warp: 8/2 cottolin (60% organic cotton/40% linen; 3,360 yd/lb; Brassard), #C101 Blanchi, 1,435 yd; #C756 Bleu Pâle, 266 yd; #C1425 Marine and #C963 Royal, 209 yd each; #C5067 Periwinkle, 105 yd; #C1410 Lavande, 67 yd.

Weft: 8/2 cottolin, #C101 Blanchi, 947 yd; #C756 Bleu Pâle and #C5067 Periwinkle, 474 yd each.

OTHER SUPPLIES

Retayne color fixative (G&K Craft Industries).

These towels combine colorful twill stripes with a basketweave ground. My goal was to play with stripe designs and get a mix of interesting textures. While differential take-up and shrinkage can be a concern when combining structures, basketweave and twill play nicely together. I love the neat look of the basketweave sections setting off each group of stripes, and the point twill in the smaller accent stripes is an intriguing detail. Cottolin is my favorite fiber choice for towels—the cotton makes the yarn easy to work with, and the linen imparts a wonderful hand to the final cloth.

This versatile draft is a great vehicle for playing with color. Make these towels your own by varying the stripe design, background color, and wefts. You can use the same stripe design across the whole warp or choose different colors for each stripe as I did. The color order in the example towels is symmetrical, but an asymmetrical color order is a bold option. Try adding accent weft stripes at each towel end. In addition to these towels, I have woven this design on a natural background with green and purple stripes and also in holiday colors. Each variation is striking and creates a different mood. While the frequent color changes make winding the warp a bit more time-consuming, the weaving goes quickly as the treadling is straightforward.

f I Wind a warp of 480 ends 4% yd long following the warp color order in Figure 1. Wind 2 additional ends of Blanchi to be used as floating selvedges and set them aside. Warp the loom using your preferred method following the draft in Figure 2. Centering for a weaving width of $20^2/_{12}$ ", sley 2 per dent in a 12-dent reed. Sley the floating selvedges through empty dents on each side of the warp and weight them over the back beam.

WARP LENGTH

482 ends 43/4 vd long (includes floating selvedges; allows 12" for take-up, 31" for loom waste and sampling).

Warp: 24 epi (2/dent in a 12-dent reed). Weft: 24 ppi.

DIMENSIONS

Width in the reed: 202/12".

Woven length: (measured under tension on the loom) 128" (32" per towel). Finished size: (after wetfinishing and hemming) four towels, 17" × 24" each.

Notes on structure

This twill threading lends itself to alternative tie-ups and treadlings allowing you to weave multiple twill variations, or even plain weave if desired.

- 2 Wind bobbins with each of the weft colors. Spread the warp with scrap yarn.
- 3 Weave 4 picks of plain weave, then begin the pattern treadling.
- 4 Continue weaving following the draft in Figure 2 for 32". When you have completed the first towel, weave 2 picks of plain weave in a contrasting yarn.
- **5** Repeat step 4 for three more towels. The calculated weft amounts yield two towels in Blanchi and one each in Bleu Pâle and Periwinkle. End with 4 picks of plain weave to secure the weft and remove the fabric from the loom.
- **6** Machine stitch the ends to stabilize them. Wet-finish in the washing machine using regular detergent. Add Retayne color

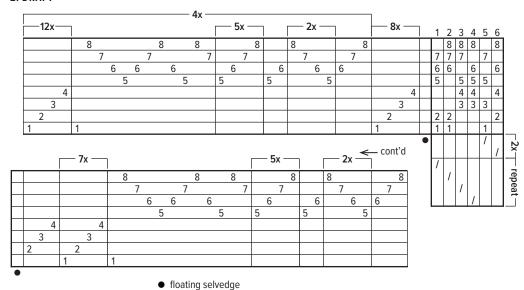


| Shaft 8 | 55 |
|---------|-----|
| Shaft 7 | 55 |
| Shaft 6 | 60 |
| Shaft 5 | 50 |
| Shaft 4 | 64 |
| Shaft 3 | 64 |
| Shaft 2 | 64 |
| Shaft 1 | 68 |
| Total | 480 |

1. WARP COLOR ORDER

| 22 | _ | | | | | | | | | 22 | | | | | | | | | #C5067 Periwinkle |
|-----|-----|-------|-----|---|----|---|----|----|---|----|----|---|----|---|---|----|---|----|-------------------|
| 14 | | | | | | | | | 7 | | 7 | | | | | | | | #C1410 Lavande |
| 44 | | | | | | | 22 | | | | | | 22 | | | | | | #C963 Royal |
| 44 | | | 22 | | | | | | | | | | | | | 22 | | | #C1425 Marine |
| 56 | | 7 | | | 7 | 7 | | 7 | | | | 7 | | 7 | 7 | | | 7 | #C756 Bleu Pâle |
| 300 | 32 | | 4 | 4 | 49 | 4 | 4 | 49 | 4 | 4 | 49 | 4 | 4 | 4 | 9 | 4 | 4 | 32 | ☐#C101 Blanchi |
| 480 | end | ls to | tal | | | | | | | | | | | | | | | | |

2. DRAFT



fixative in the presoak cycle to reduce dye migration, and wash with hot water to maximize potential shrinkage and remove any fugitive dye. Machine dry on medium heat until just damp, then cut the towels apart and hard-press with a hot iron.

7 Hem by folding the cut edges over twice, pressing, and sewing by hand or machine.

 ${\tt MEGAN\ M.\ Macbride}\ is\ a\ scientist\ by$ day and a weaver by night in upstate New York.





Broken Stripe Towel

PATTY CRANE



STRUCTURE

Twill.

EQUIPMENT

4-shaft loom, 21" weaving width; 10-dent reed; 1 shuttle; 3 bobbins.

YARNS

Warp: 8/2 cotton (3,360 yd/lb; Brassard), #100 Naturel, 644 yd; #1244 Olive, #8265 Orange Brulé, #1425 Marine, and #5139 Lime, 40 vd each. Weft: 6/2 unmercerized cotton (100% cotton; 2,250 yd/ lb; Fox Fibre), 25% Brown, 334 yd. 8/2 cotton, #8265 Orange Brulé and #1425 Marine, 13 yd each. Note: Fox Fibre 6/2 unmercerized cotton 25% Brown has been discontinued. A good substitute is 6/2 unmercerized cotton (100% cotton; 2,520 yd/lb; Bluegrass Mills), Pecan.

WARP LENGTH

402 ends 2 yd long (includes floating selvedges; allows 5" for take-up, 37" for loom waste). Note: To weave additional towels, add 1 yd to the warp length for each additional towel.

SETTS

Warp: 20 epi (2/dent in a 10-dent reed). Weft: 20 ppi.

DIMENSIONS

Width in reed: 20²/10". Woven length: 30". Finished size: (after wetfinishing and hemming) one towel 161/2" × 241/2".

This draft came from a Canadian friend, Deanna Walsh, now deceased, who brought a lovely towel to our guild show-and-tell. She called the pattern "Doukhobor Twill Towels," and when I saw it, I knew that I wanted to weave at least one. I did a little research and found that the Doukhobors immigrated to Canada from Russia in the late nineteenth century to escape religious persecution. From there they settled in agrarian communities near Castlegar and Grand Forks, British Columbia. The Doukhobors were known for their spinning, weaving, and needlework. Today about 30.000 descendents of the Doukhobors live in western Canada, and some continue the sect's traditions.

f I Wind a warp of 400 ends 2 yd long following the warp color order in Figure 1. Wind 2 additional ends of Naturel to be used as floating selvedges and set them aside. Warp the loom using your preferred method following the draft in Figure 2. Note: Patty purposely offset the stripes from the twill breaks to give them a more interesting appearance. Centering for a weaving width of 202/10", sley 2 per dent in a 10-dent reed. Sley the floating selvedges through empty dents on each side of the warp and weight them over the back beam.

f 2 Wind bobbins with each of the weft colors. Spread the warp with scrap yarn.

 $oldsymbol{3}$ Weave following the draft in Figure 2 and the weft color order in Figure 3 for about 30". The first and last 11/2" of weaving at each end will be the hems. If making more than one towel, weave 2 picks of a contrasting color and continue weaving. After the last towel, weave a few picks of scrap yarn to protect the weft.

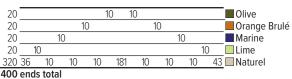
Notes on Doukhobor drafts

Because they had looms with a direct tie-up, Doukhobor weavers wove broken twills, huck, plain weave, and lace. The drafts passed from person to person without being recorded.

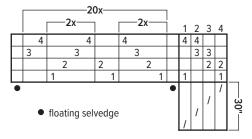


| 400 |
|-----|
| 100 |
| 100 |
| 100 |
| 100 |
| |

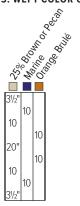
1. WARP COLOR ORDER



2. DRAFT



3. WEFT COLOR ORDER



4 Cut the fabric off the loom. Zigzag the ends and trim. Fold the hems under twice and hem by machine or hand. Wet-finish by machine washing in warm water and machine drying.

RESOURCES

Doukhobor Cultural Interpretive Society, doukhoborcis.org/index.htm. Rak, Julie, and George Woodcock, "Doukhobors." The Canadian Encyclopedia. Updated January 6, 2022. thecanadianencyclopedia.ca/en /article/doukhobors.

PATTY CRANE lives in the hills of the Kettle Range in eastern Washington and enjoys a view of the Kettle River from her studio.



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Candy Stripe Blankets

MAIYNDA ALIFN



STRUCTURE

Twill and plain weave.

EQUIPMENT

6-shaft loom, 38" weaving width; 8-dent reed; 1 shuttle.

YARNS

Warp: 6/2 cotton (2,520 yd/lb; Valley Yarns; WEBS), Burgundy, 624 yd; Sienna, 520 yd; Pale Yellow, 1,416 vd. 10/2 unmercerized cotton (4,200 vd/lb; Georgia Yarn Company), Chocolate, 384 yd (used doubled). Weft: 6/2 cotton, Sienna and Pale Yellow, 880 yd each.

WARP LENGTH

688 working ends (736 total ends) 4 yd long (includes floating selvedges; allows 11" for take-up, 23" for loom waste).

I live in a nostalgic "town that time forgot." Historic buildings line Main Street: log cabins, a tiny fire station, a rock church, an oldtime general store, and a restaurant that used to be the candy shop. I remember old-fashioned candy sticks that came in a large array of colors and flavors, stripes swirling around and around, some wide and some narrow.

The twill in these blankets reminds me of twisting candy stripes. Butterscotch colors are threaded in a herringbone twill, separated by plain weave, and woven with a treadling pattern adapted from Anne Dixon's *The Handweaver's Pattern Directory*. I changed the broken point twill treadling to be more fluid and accommodate the plain weave between the textured twirling twill stripes. Soft 6/2 cotton provides cuddly warmth. What child wouldn't love a candystriped blanket?

Simplify the color scheme to natural or white with only one contrasting color and enjoy your favorite flavor or color, such as sour apple green, strawberry pink, or blueberry blue blankets. Add length and fringe to make a lovely throw.

f l Wind a warp of 686 working ends 4 yd long following the warp color order, Figure 1. Wind 2 additional ends of Pale Yellow to be used as floating selvedges and set them aside. Warp the loom using your preferred method following the draft in Figure 2. Centering for a weaving width of 37%, sley an 8-dent reed following the draft as indicated, using 2 ends/dent in the plain-weave areas and 3-2 ends/dent in the twill areas. Sley the floating selvedges through empty dents on each side of the warp and weight them over the back beam.

SETTS

Warp: 16 epi in plainweave sections (2/dent in an 8-dent reed); 20 epi in twill sections (3-2/dent in an 8-dent reed). Weft: 14 ppi.

DIMENSIONS

Width in the reed: 373/8". Woven length: (measured under tension on the loom) 110" (about 55" per blanket). Finished size: (after wet-finishing and hemming) two blankets, 32" × 46" each.

A note on sett

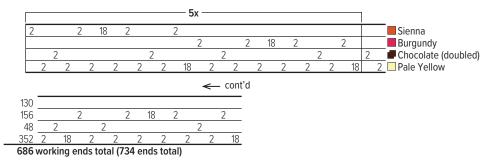
Using a tighter sett in the reed for the twill sections makes the twill pop or float above the plain weave, giving a beautiful texture to the blankets.



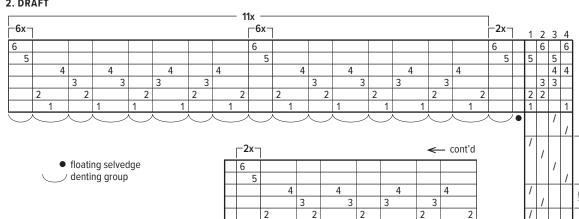


Shaft 6 136 Shaft 5 136 Shaft 4 92 Shaft 3 92 Shaft 2 115 Shaft 1 115 Total 686

1. WARP COLOR ORDER



2. DRAFT



- f 2 Wind a bobbin with Sienna. Spread the warp with scrap yarn.
- $oldsymbol{3}$ Weave following the draft, Figure 2, for about 54". Then, as indicated in the treadling, weave the balance picks.
- 4 Weave 2 picks of scrap yarn to indicate a cutting line. Weave the second blanket as you did the first, this time using Pale Yellow for the weft.
- **5** Weave a few picks of scrap yarn to protect the weft. Cut the fabric from the loom. Zigzag stitch the ends of each blanket. Separate the blankets by cutting between the scrap yarn picks.

6 Wet-finish the blankets by machine washing in warm water and machine drying until dampdry. Press and allow to dry. Turn up the ends of each blanket 11/4". Press. Turn the raw edges under to meet the fold. Press again. Hand or machine sew the hems in place.

RESOURCES

Dixon, Anne. The Handweaver's Pattern Directory. Fort Collins, CO: Interweave, 2007, 86-87.

A mother of nine, MALYNDA ALLEN enjoys wrapping her children and grandchildren in handwoven blankets.



Gold Rush Shawl

CYNTHIA COX



STRUCTURE

Twill.

EQUIPMENT

4-shaft loom, 21" weaving width; 12-dent reed; 1 shuttle; 3 bobbins.

YARNS

Warp: 5/2 Bamboo (2,100 yd/lb; Valley Yarns; WEBS), Gold, 741 yd.

Weft: 5/2 Bamboo, Gold, 173 vd; Grey Teal and Salmon, 126 yd each.

WARP LENGTH

247 ends 3 yd long (includes floating selvedges; allows 6" for take-up, 40" for loom waste; loom waste includes fringe).

SETTS

Warp: 12 epi (1/dent in a 12-dent reed). **Weft:** 11 ppi.

DIMENSIONS

Width in the reed: 201/12" Woven length: (measured under tension on the loom) 62".

Finished size: (after wet-finishing) 181/2" × 61" plus 71/2" fringe.

When I saw the color palette and theme for this issue, I was inspired to weave a vibrant lacy shawl in my all-time favorite twill pattern. This shawl glows with the colors of the west Texas sunset and mountain views I see from my home in Alpine. I find bamboo lovely to weave with: the colors are rich, the sheen is unbeatable, and bamboo fringe is swingy and fun.

I love designing with twills, usually by putting more complexity into the threading order so I can simplify the treadling. I have used this particular pattern in many projects, from scarves to table linens, with adaptations to the treadling. Twill is enjoyable to weave and not just because of the myriad treadling possibilities. The variety using only four shafts is endless, you get incredible drape with almost any fiber used, and you can get some nice lacy effects, as seen in this project. I often just put on a long warp and start weaving!

I Wind a warp of 245 ends 3 yd long in Gold. Wind 2 additional ends to be used as floating selvedges and set them aside. Warp the loom using your preferred method following the draft in Figure 1. Centering for a weaving width of 201/12", sley 1 per dent in a 12-dent reed. Sley the floating selvedges through empty dents on each side of the warp and weight them over the back beam.

 $oldsymbol{2}$ Wind bobbins with each of the weft colors. Leaving at least 11" of unwoven warp for fringe, spread the warp with scrap yarn.

3 Leaving a tail 1 yd long for hemstitching, weave 10 picks plain weave in Gold. Use the tail to hemstitch in groups of 4 warp ends (the last group will be 3 ends). Then begin the pattern treadling with Gold.

Note on structure

While much of this shawl's warp is threaded in an advancing-twill design, the simplified treadling contains areas of plain weave, creating an interesting compound structure.



4 Continue weaving following the draft in Figure 1 and the weft color order in Figure 2. Maintain a light, even beat throughout. End with 10 picks of plain weave and hemstitch as you did at the beginning.

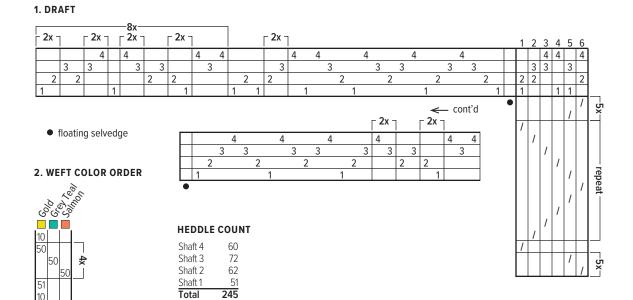
5 Leaving at least 11" for fringe on both ends, cut the fabric from the

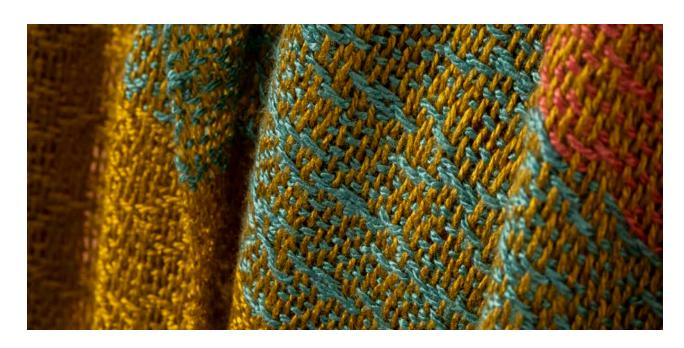
loom. Tie each hemstitched bundle in an overhand knot at the fabric edge. Prepare a twisted fringe using one hemstitched group in each fringe. Trim fringe ends to even.

 $\mathbf{6}$ Wet-finish by hand in warm water by gently agitating and then leaving the shawl to soak for 20 minutes.

Line-dry. Steam-press lightly to enhance the twill pattern's visibility.

CYNTHIA COX enjoys designing and weaving in her west Texas studio, The Wild Weft. The colors, variety of patterns, and textures seen in the mountain desert landscape provide endless inspiration for her designs.



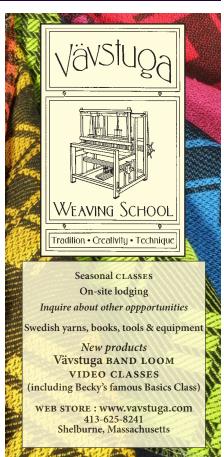














Advancing by Steps

DEBORAH HEYMAN



STRUCTURE

Twill

EQUIPMENT

8-shaft loom, 36" weaving width; 10-dent reed; 1-5 shuttles; 5 bobbins.

YARNS

Warp: Bambu 7 (100% bamboo; 2,100 yd/lb; Silk City Fibers), #360 Onyx, 1,775 yd; #051 Wine, 1,755 yd; #404 Tide Blue, 20 vd.

Weft: Bambu 7, #980 Tangerine, 292 yd; #885 Pumpkin, 254 yd; #106 Aruba, 370 yd; #404 Tide Blue, 550 yd; #014 Teal, 667 yd.

WARP LENGTH

710 ends 5 yd long (includes doubled floating selvedges; allows 15" for take-up, 50" for loom waste: loom waste includes fringe).

SETTS

Warp: 20 epi (2/dent in a 10-dent reed). Weft: 17 ppi.

DIMENSIONS

Width in the reed: 355/10".

Woven length: (measured under tension on the loom) 115". Finished size: (after wetfinishing) 28" × 95" plus 6" fringe.

I first heard about advancing twills when computers were just beginning to be used by handweavers. Someone told me that computers enabled the designing of advancing twills—so I concluded they must be a *very* complicated weave structure. Now, years later, I've discovered these twills aren't really complicated after all. And I also understand the role a computer plays—graphing all of the drawdowns you might want to explore by hand before settling on your final design would be a daunting task. Weaving software allows you to try out a lot of "what ifs" before putting yarn on your loom. As weave structures go, advancing twills allow for a fair amount of freedom during design. Software allows you to immediately see the results as you experiment with small changes, making the twill march up or down in the threading or treadling.

I used Bambu 7 and really love the soft feel and drape—with one caveat. I found the yarn to be a bit more susceptible to abrasion than other fibers. The Onyx thread in particular seemed more prone to this than the lighter colors, so I used a contrasting blue for my floating selvedges and doubled them. As I wove, when I noticed that one of the two strands was wearing thin, I would replace it. I had very little trouble with any of the other warp ends.

Editor's note: Because the draft for this shawl uses 12 treadles, two more than many 8-shaft looms have, and the treadling alone covers 5 pages, we decided to put the draft and weft color order on the website as a free pdf download at handwovenmagazine.com /advancing-by-steps-MJ22/. The WIF is available in the WIF library, handwovenmagazine.com/wif-library/.

f I Wind a warp of 706 ends 5 yd long following the warp color order in Figure 1. Wind 4 additional ends of Tide Blue to be used

Notes on designing

When designing with weaving software, once you have settled on a design that you like, use the "float search" tool. If there are any floats that are longer than you prefer, this often can be corrected with a tweak or two in your draft. If not, you can go back to playing the "what if" game on your computer until you come up with something that works better.

as floating selvedges and set them aside. Warp the loom using your preferred method following the draft in Figure 2. Centering for a weaving width of 355/10", sley 2/dent in a 10-dent reed. Sley the doubled floating selvedges through empty dents on each side of the warp and weight them over the back beam.

2 Wind bobbins with each of the weft colors. Leaving at least 8" of unwoven warp for fringe, spread the warp with scrap yarn.

3 With a contrasting color, weave a header of about 2", to be removed later. Weave following the draft in Figure 2 and the weft color order in Figure 3 for about 115". End with about 2" of header as you did in the beginning.

HEDDLE COUNT

| Total | 706 |
|---------|-----|
| Shaft 1 | 30 |
| Shaft 2 | 58 |
| Shaft 3 | 88 |
| Shaft 4 | 104 |
| Shaft 5 | 137 |
| Shaft 6 | 128 |
| Shaft 7 | 92 |
| Shaft 8 | 69 |
| | |

1. WARP COLOR ORDER

| | | | ۲3 | х- | | | | |
|----------------|-----|---|----|----|----|-----|------|--|
| 351 | 66 | | 73 | | 66 | | Wine | |
| 355 | 164 | 7 | | 7 | | 163 | Onyx | |
| 706 ends total | | | | | | | | |

4 Leaving at least 9" for fringe on both ends, cut the fabric from the loom.

5 Wet-finish by hand in warm water with mild detergent by gently agitating and then leaving the throw to soak for 20 minutes. Rinse thoroughly. Dry in the dryer and remove while still damp; press while damp.

6 Prepare a twisted fringe using bundles of about 22 ends in each fringe. While working along the width, remove the 2" header by pulling out just the ends you need for each fringe bundle (this will keep everything in place as you work). Knot the fringe at 5" from the edge of the weaving. Trim to 6".

DEBORAH HEYMAN lives in Irvine, California, and is grateful for the benefits of creative pursuits during this pandemic.



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|----------------------------------|---------------------------------------|
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| Dances With Wool79 | New World Textiles65 |
| dje Handwovens 65 | Prairie City Fiber Fest |
| Eugene Textiles | Purrington Looms 65 |
| Fancy Fibers Fiber Art Center 79 | R & M Yarns |
| Fiberwood Studio Ltd65 | Schacht Spindle Co., Inc |
| Fiberworks | The Fiber House79 |
| Glimåkra USA31 | The Woolery23 |
| Halcyon Yarn2 | Treenway Silks 55 |
| Harrisville Designs, Inc | Vävstuga LLC55 |
| Jane Stafford Textiles5 | Vermont Weaving Supplies65, 79 |
| John C. Campbell Folk School 35 | Weavers' Guild of Boston 65 |
| Kromski North America23 | Webs |
| Leclerc Looms | Woolgatherers Ltd LLC 79 |
| LoftyFiber55 | Yadkin Valley Fiber Center 79 |
| Lone Star Loom Room55 | Yarn Barn of KansasC3 |

Natural Elegance

JUDY STEWART



STRUCTURE

Twill and plain weave.

EQUIPMENT

8-shaft loom, 10" weaving width; 8-dent reed; 1 shuttle.

YARNS

Warp: 30/2 Carmelina (100% muga wild silk; 6,800 yd/ lb; 1,500 yd/3.5 oz; Treenway Silks), Natural, 176 yd. 30/2 Silken Fog (55% bombyx silk/45% yak; 7,400 yd/ lb; 1,625 yd/3.5 oz; Treenway Silks), Natural, 429 yd. Weft: 30/2 Carmelina 30/2, Natural, 659 yd.

WARP LENGTH

220 ends 2¾ yd long (includes floating selvedges; allows 8" for take-up, 21" for loom waste; loom waste includes fringe).

SETTS

Warp: 26 epi (3-3-3-4/ dent in an 8-dent reed). Weft: 36 ppi.

DIMENSIONS

Width in the reed: 84/8". Woven length: (measured under tension on the loom) 701/4". Finished size: (after wetfinishing) 61/2" × 61" plus 31/2" fringe.

Luxury yarns suggest a sophisticated fabric that would appeal to men or women. While holding a skein of muga silk in one hand and a cone of a silk/yak blend in the other, thoughts of an elegant twill immediately came to my mind. I wanted to present the silk equally alongside the yak blend, so I decided to use a broken-chevron twill to highlight both yarns. Using the yak allowed me to weave with fine yarns at a looser sett than normal, as the yak fulls nicely during wet-finishing.

The muga silk is smooth and tightly spun, with little stretch. The yak blend is more softly spun and has some stretch to it, so winding the warp required some care to achieve even tension. I wound the silk as usual on the warping board, but when winding the silk/yak blend, I released the tension at each "turnaround" on the warping board, letting the yarn relax slightly. This allowed the yarn to have some give when it came time to wind it onto the loom side by side with the less elastic muga silk. By the end of dressing the loom, the ends were even lengths, and the tension was uniform. In fact, the winding process was the smoothest I have ever experienced.

The scarf is shimmering and warm with a soft drape. In this natural color palette, it is a scarf that anyone would love to wear.

 $oldsymbol{1}$ Wind a warp of 218 ends following the warp color order in Figure 1. Refer to the introduction for tips on winding the two types of yarn. Wind 2 additional ends of the muga silk to be used for floating selvedges and set them aside. Warp the loom using your preferred method following the draft in Figure 2. Centering for a weaving width of 81/8", sley 3-3-3-4 ends per dent in an 8-dent reed for an epi of 26. Sley the floating selvedges through empty dents on each side of the warp and weight them over the back beam.

Notes on combining weave structures

Breaking a six-shaft chevron twill with two ends threaded for plain weave added visual interest to an otherwise simple twill.





| Shaft 8 | 26 |
|---------|----|
| Shaft 7 | 26 |
| Shaft 6 | 26 |
| Shaft 5 | 26 |
| Shaft 4 | 26 |
| Shaft 3 | 26 |
| Shaft 2 | 31 |
| Shaft 1 | 31 |

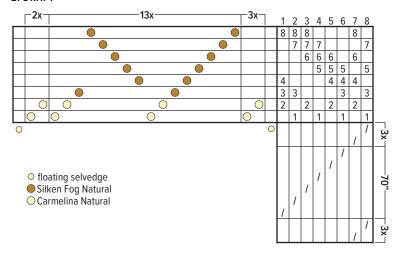
218

1. WARP COLOR ORDER

| | | _[26 | Sx- | | |
|-----|----|-----------------|-----|----|--------------------|
| 156 | | | 6 | | Silken Fog Natural |
| 62 | 4 | 2 | | 6 | Carmelina Natural |
| 218 | en | ds | tot | al | |

2. DRAFT

Total



WEAVING NOTES

You can and should check your beat after the first 36 picks (6 treadling repeats). Judy's ppi sett was too dense at that point so she taught herself to beat with just a gentle firmness. Once she

"got the beat," it all went very well. In the woven sample, she first beat at 40 ppi, then at 36 ppi. Both were acceptable, but the 36 ppi density produces a cloth with more flow and drape.



- f 2 Wind a bobbin with the weft. Leaving at least 6" of unwoven warp for fringe, spread the warp with scrap yarn.
- 3 Leaving a weft tail 1 yd long for hemstitching, weave 6 picks of plain weave, then begin the pattern treadling. Use the tail to hemstitch in groups of 3. (Judy hemstitched 4 ends in every fourth group, to help keep herself organized and provide a quick check on her sleying.)
- 4 Continue weaving following the draft in Figure 2 for about 70". End with 6 picks of plain weave and hemstitch as you did at the beginning.
- **5** Leaving at least 6" for fringe on both ends, cut the scarf from the loom.
- **6** Trim the fringe to 5½". Prepare a twisted fringe using 2 groups of hemstitched ends in each fringe.
- 7 Wet-finish the scarf by hand in tepid water by gently agitating, making sure it is completely wet. Rinse, again in tepid—not hot water. Squeeze out excess water and line-dry. Press to bring out the silk's sheen.

JUDY STEWART loves textiles and the connections they bring with the countless textile artists through time and around the globe.



Sunset Twist

EILEEN LEE



STRUCTURE

Twill.

EQUIPMENT

8-shaft loom, 13" weaving width; 12-dent reed; 1 shuttle.

YARNS

Warp: 8/2 Tencel (100% lyocell; 3,360 yd/lb; Valley Yarns; WEBS), Olive and Ruby, 315 yd each; Red Purple, 9 yd. Painted warp: 8/2 Tencel (100% lyocell; 3,360 yd/lb; Carr Park Artisans), Autumn Journey, 200 strands 4½ yd warp. Weft: 8/2 Tencel, Red Purple, 1,146 yd.

OTHER SUPPLIES

Reed holder, optional but recommended.

Enhancing a simple twill with a painted warp creates a beautiful fabric. Going a step further and incorporating solid colors within the painted warp adds even more interest. That is what I did for this shawl using a painted warp and two colors. The effect is of flowing streams of multicolored water or a sunset as it changes colors.

I warp this type of project front to back because I arrange the three warps in the reed first. Directions are given for sleying on a table using a reed holder, which makes the process easier, but you can also sley your reed on the loom. The length of the pre-wound warp determined my warp length and provided sufficient warp for 2 shawls.

 \blacksquare Wind 2 separate warps of 70 ends $4\frac{1}{2}$ yd long each of solid colors Ruby and Olive, making small, tight chains. Wind 2 additional ends of Red Purple to be used as floating selvedges and set them aside. Note: From the 200-strand pre-wound painted warp you will be using 168 strands. Set the remaining 32 ends aside. Warp the loom front to back so the three warps can be combined in the reed (see Weaving Tip). Centering for a weaving width of 13", sley 2 per dent in a 12-dent reed following the warp color order, Figure 1, and steps a-e. If you are not using a reed holder, follow steps b-d.

- a Set the reed on a table in a reed holder.
- **b** Sley the painted warp following the warp color order, skipping groups of 14 dents for the other two warp colors. Put the warp chain off to the side.
- c Sley the Olive warp ends in empty dents following the warp color order and skipping groups of 7 dents for Ruby. Set the Olive warp chain off to the side.

WARP LENGTH

310 ends 41/2 vd long (includes floating selvedges; allows 12" for take-up, 30" for loom waste; loom waste includes fringe).

SETT

Warp: 24 epi (2/dent in a 12-dent reed). Weft: 24 ppi.

DIMENSIONS

Width in the reed: 13". Woven length: (measured under tension on the loom) 120". Finished size: Two circular shawls, 111/2" × 49" with 3" fringe on one end.

Notes on reed holders

Rather than sleying your reed in the loom, using a reed holder allows you to place the reed in a position and at a height that is comfortable for you. Reed holders are particularly useful in cases when you are sleying the reed with multiple warps.

- **d** Finish sleying the Ruby warp ends in the remaining dents.
- e Move the reed to the loom, keeping the warps stacked: bottom is painted warp, then Olive, then Ruby on top.

Thread the heddles following the draft, Figure 2. Sley the floating selvedges in empty dents on each side of the warp and weight them over the back beam.

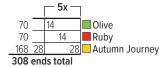
- f 2 Wind a bobbin with the weft. Leaving at least 8" of unwoven warp for fringe, spread the warp with scrap yarn.
- **3** Leaving a tail 1 yd long for hemstitching, start weaving pattern. After 8 picks, use the tail to hemstitch in groups of 4 warp ends.

Shaft 8 22 Shaft 7 44 Shaft 6 44 Shaft 5 44 Shaft 4 44 44 Shaft 3 Shaft 2 44

22

308

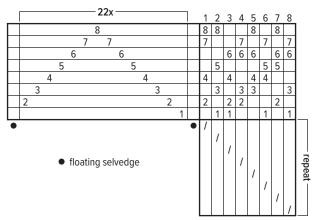
1. WARP COLOR ORDER



2. DRAFT

Shaft 1

Total





Weaving tip

When winding on, do not comb the warp (this will make a tangled mess). Lift the warps to separate them. Pull the beater down to open the warps as you are winding.

- 4 Continue weaving following the draft, Figure 2, until you can no longer get a shed. Hemstitch as you did at the beginning.
- **5** Remove the fabric from the loom leaving 8" of unwoven warp on each end. Prepare a twisted fringe with 3 fringes in each painted warp stripe and 2 fringes in each Ruby and Olive stripe.
- **6** Wet-finish by hand in warm water by gently agitating and then leaving the fabric to soak for 20 minutes. Line-dry. Press.
- 7 Measure 50" or desired length from fringed end and machine stitch across the fabric. Cut the fabric. Turn the cut end under 1/2" and press. Twist the shawl once or twice (depending on how it fits you; Eileen used 11/2 twists). Overlap the folded end ½" with the selvedge at the fringe end of the shawl. Sew by machine or by hand near the fold and again near the selvedge. Repeat for the second shawl.

EILEEN LEE from Grass Valley, California, has a studio near her home where she teaches weaving, spinning, dyeing, and knitting. When not teaching, she spends most of her time weaving and selling her products.







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A Brief History of **Turkish Towels**

By K. Rose James

The year is 1600. You are walking down a busy street in Denizli, a bustling town in the center of the vast Ottoman Empire. The valley community is laced with rivers, and to the west sit emerald-green mountains, habitually topped by a halo of puffy white clouds.

Denizli is a city of industry. Wine flows freely from local vineyards, ready to be sent throughout the region, and fields of cotton blow in the wind waiting for harvest.

As you walk through the streets, you are enveloped by sound and color. You hear myriad tongues and see the houses of worship from a mosaic of faiths. The architecture is also a patchwork, showcasing the town's Greek history and current Muslim majority.

In Denizli, it seems every road leads to one of the city's 16 bathhouses, and along with diverse languages, you hear the click, click, click of countless looms, turning cotton into cloth.

The history of Turkish towels is woven within the expansion of an empire. From 1300 until 1922, the vast Ottoman Empire encircled the Mediterranean. Multiethnic life in the Ottoman Empire sprang naturally from the region's diverse history, and Greek, Roman, Byzantine, Mongol, Persian, and Egyptian customs were prominently visible in society.

One of these customs was the hammam, or Turkish bath. Public baths were an important part of ancient Roman and Byzantine empires, and as the Ottoman Empire spread, the hammam became just as important. Ottoman hammams were a place to meet friends, make deals, and debate policy, and they were an integral part of rituals surrounding marriage and birth. Similar to the classical Roman baths, they featured an undressing room and a series of communal pools filled with cool, warm, and hot water.

Turkish baths could be privately owned, but during the height of the Ottoman Empire, they were seen as integral civic spaces and were usually managed by the government and paid for with taxes. They became a space to showcase the grandeur of the empire and were often architecturally stunning.

By the seventeenth century, hammams allowed women, though men and women bathed in strictly separate areas. The baths became one of the few acceptable public spaces for women to gather.

All of this public bathing in a Muslim-dominated empire caused a conundrum. Religious leaders were concerned about preserving modesty but still wanted hammams to thrive, allowing the faithful a place to ritually bathe themselves before prayer.

Enter the *peshtemal* (sometimes written as pestemal), known colloquially as the Turkish towel. Coming into use in the early 1600s, peshtemals were flat-woven, handembroidered, long enough to completely envelop the body, and were originally intended to help bathers maintain privacy in public baths. They were lightweight enough to be easily transportable and were made of absorbent cotton.

Historically, the purchase of a peshtemal might mark a momentous occasion, such as a wedding or birth. Unique patterns were woven into the fabric, representing different regions. The towels were considered a luxury until the industrialization of the nineteenth century.



This handwoven looped Turkish towel was discovered at a restaurant, where it was used to wipe up messes. Though the towel is over a century old and was abused for years, it remains in almost perfect condition.

Photos by Jennifer Gaudet of Jennifer's Hamam



A partially woven peshtemal made by one of the weavers at Jennifer's Hamam using traditional weaving methods and locally sourced Turkish cotton.

Cotton had been grown in the region for centuries, with evidence of cultivation dating to 400 BCE. In general, Turkish cotton has longer fibers than other global varieties. These longer fibers, combined with a flat weave, created a towel that was extremely absorbent for its weight and thickness.

By the time of the peshtemal's advent, the region that is now Turkey was already well known for the manufacture of luxurious carpets. As the Ottoman culture spread through the area, new weaving techniques merged with traditional craft. As peshtemals became more desirable, wealthy citizens demanded complex and elegant designs from the weavers. After a century of ever-increasing intricacy, weavers introduced a new technique of creating looped pile using a supplemental warp. These loops gradually

were used to create patterns or designs, and in some cases, they covered the entire towel. The looped pile Turkish towels are related to, but separate from, peshtemals.

In the ancient Ottoman Empire, the government ruled craftspeople with a strict hand. Design, thread length, and even proper production time were dictated by the administration. The weavers themselves were sometimes transported across the empire based on local need.

Today, Turkey remains an international hub of cotton production, weaving, and textiles. While Turkish style towels are available throughout the world, true peshtemals are still produced, mostly by machine. Only one company, Jennifer's Hamam, still crafts peshtemals and looped Turkish towels by hand using traditional

techniques. The regional designs that once enticed Ottoman nobles now tempt global tourists. Water still flows through ancient Turkish baths, now a recreational attraction rather than an important civic hub. A peshtemal might still be employed to preserve modesty, but it is more commonly an item of comfort, used to warm bathers after a dip in a cold pool, to dry off on a sandy beach, or to cozy up on a comfortable couch.

RESOURCES

Goodman, Jason. Lords of the Horizons: A History of the Ottoman Empire. New York: Henry Holt & Company, 2014. Turkish Cultural Foundation, turkish culture.org.

K. ROSE JAMES is an educator, historian. and green-vegetable enthusiast.



Big Wrap Beach Blanket

CYNTHIA NEWMAN WITH KATZY LUHRING



STRUCTURE

Twill.

EQUIPMENT

4-shaft loom, 47" weaving width; 12-dent reed; 2 shuttles. Note: This is a 4-shaft project but requires 8 treadles, 2 more than are on most 4-shaft looms. A skeleton tie-up is provided for weaving on a 4-shaft, 6-treadle loom using 2 treadles at a time.

YARNS

Warp: 10/2 unmercerized cotton (4,200 yd/lb; American Maid; Lunatic Fringe Yarns), Natural White, 3,324 yd.

Weft: 10/2 unmercerized cotton, Natural White, 1,831 yd; Dark Green, 824 yd.

OTHER SUPPLIES

Baking or washing soda.

WARP LENGTH

1,108 ends 3 yd long (includes doubled floating selvedges; allows 9" for take-up, 21" for loom waste; loom waste includes fringe).

SETTS

Warp: 24 epi (2/dent in a 12-dent reed). Weft: 24 ppi.

DIMENSIONS

Width in the reed: 462/12" Woven length: (measured under tension on the loom) 78". Finished size: (after wetfinishing) 39" × 73" plus 21/2" fringe.

After a long winter, my thoughts turn to summer and visiting the beach along the Washington coast. When the breeze picks up, it is nice to wrap up in a lightweight blanket, which can serve equally well as a picnic cloth or a beach towel. For this project, I collaborated with Katzy Luhring of Lunatic Fringe Yarns; my part of the project was designing the blanket, and hers was the weaving. We had many adventures along the way, texting back and forth about our progress. We chose American Maid naturally colored cotton yarns for their color palette and soft, cozy hand; we used changes in weft color to create the stripes and a 1/3 twill to add surface texture. We finished the fringe with a series of overhand knots and then split the groups of ends to make smaller twisted fringe bundles. To shift the subtle green to a beautiful brighter green, we added baking soda to the wash water during wet-finishing.

Popular and well-known striped twill Turkish towels were my initial inspiration. While drawing designs in my sketchbook, I found one I wanted to explore and transferred the design to a ¼-scale drawing. I quickly realized I wanted to see the design in full scale, so I taped sheets of paper together to create a full-scale 40-by-70-inch model that I laid out on the floor, sketching stripes on it with a black marker. I started by sketching stripes that appealed to me, thinking about how they related to one another, wanting a variety of large and small stripes, and balancing the positive and negative areas of the green and white. I considered proportion guidelines but didn't strictly adhere to them, opting for what felt balanced to my eye.

f I Wind a warp of 1,104 ends 3 yd long with Natural White. Wind 4 additional ends to be used as doubled floating selvedges and set

Naturally colored American Maid yarns

The yarns for this shawl were grown and spun in the United States. The Dark Green naturally colored weft will become darker when washed and will continue to change throughout the life of the cloth.

them aside. Warp the loom using your preferred method following the draft in Figure 1. Centering for a weaving width of 462/12", sley 2 per dent in a 12-dent reed. Sley the doubled floating selvedges through empty dents on each side of the warp and weight them over the back beam.

2 Wind bobbins with each of the weft colors. Leaving at least 8" of unwoven warp for fringe, spread the warp with scrap yarn.

3 Leaving a tail 33/4 yd long for hemstitching, weave 4 picks of basketweave, then begin the pattern treadling using either the regular tie-up or the skeleton tie-up, depending on your loom. Use the tail to hemstitch in groups of 6 warp ends. Include the double floating selvedges in the first and last groups.

1. DRAFTS **HEDDLE COUNT** 276 Shaft 4 Regular tie-up on 8 treadles Skeleton tie-up Shaft 3 276 -276x Shaft 2 276 Shaft 1 276 Total 1104 3 1 2. WEFT COLOR ORDER Ż Oill Medical Parties 100 ONK GOON × doubled floating selvedge doubled floating selvedge 12 24 Use two treadles when indicated 52 in the skeleton tie-up treading. 12 48 12 132 8



4 Continue weaving following the draft in Figure 1 and the weft color order in Figure 2 for about 78". End with 4 picks of basketweave and hemstitch as you did at the beginning.

5 Leaving at least 8" for fringe on both ends, cut the fabric from the loom. Trim the fringe ends to 8". Prepare fringe by gathering groups of 6 ends from the hemstitching.

The first and last groups will include the double floating selvedges, so they will contain 8 ends. Begin by taking 2 groups of 6 at a time and tie an overhand knot below the hemstitching (12 ends). Next, take 2 groups of the 12 and knot them together (24 ends). Then take 2 groups of the 24 ends and knot them together (48 ends). Split the group of 48 into 2 groups of 24 and twist the fringe in each group,

knotting the ends (see photo of fringe detail).

6 Wet-finish by hand in hot water with 2 tablespoons of baking or washing soda and a mild detergent, gently agitating and then leaving the blanket to soak for 20 minutes. Line-dry.

RESOURCES

Keasbey, Doramay. *Pattern Techniques* for Handweavers. Eugene, OR: self-published, 2005.

van der Hoogt, Madelyn. *The Complete Book of Drafting*. Petaluma, CA: Unicorn Books and Crafts, 1993.

CYNTHIA NEWMAN enjoys finding patterns in architecture and nature and translating them into weavings. She shares her time between northeast Oregon and the Olympic peninsula.

KATZY LUHRING loves to transform woven ideas into reality. She is co-owner of Lunatic Fringe Yarns and spends her time surrounded by beautiful yarns!

136 8 132

32 16 48

48 16

20

16

4 20

20



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Scheepjes Yarns

BARBARA GOUDSMIT





Scheepjes, Whirl - Fine Art, 503 yd/ 220 g, 50% superwash merino wool, 25% microfiber, 25% acrylic. Scheepjes, River Washed, 142 yd/50 g, 78% cotton, 22% acrylic.

The Dutch yarn company Scheepjes is well known among knitters and crocheters but not so much among weavers. Living as I do in the Netherlands, I can find Scheepjes in local yarn shops, and I have woven with their yarns on many occasions. For these samples, I wove with two Scheepjes yarns readily available in the United States.





Photo courtesy of Scheepjes

variegated look. In other colorways, the two colors contrast, leading to surprising color blends.

River Washed is slightly thinner than Whirl - Fine Art, but the two yarn sizes are close enough to work well together, as I discovered in my sampling.

I wet-finished all the samples by soaking them in warm water with a detergent suitable for delicates and drying them flat.

Whirl – Fine Art is a DK-weight yarn with a long gradient color change. The yarn consists of six loosely plied thin threads. All six threads start as the same color, but after a few yards, one of the threads changes color. After another few yards, a second thin thread changes color, and so on. At the location of color changes, the yarn is felted slightly to hide the knot.

River Washed, a sportweight yarn, has an inner cotton thread surrounded by a net of a different color. In some colorways, the two colors are similar, giving the yarn a beautiful, subtly

WARP 1

I wove the first set of samples on a warp of Whirl- Fine Art with two colorways. On one side of the loom, I used the colorway #650 Minimalism, alternating ends of dark and light gray by pulling from two places in the skein, one that started out dark and the other that started out light. On the other side of the warp, I replaced the dark gray ends with the turquoise colors of the colorway #660 Surrealism but left the light gray ends of Minimalism.



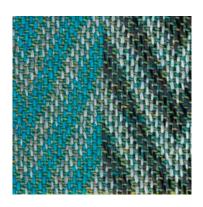
8-shaft shadow weave

Weft: Whirl - Fine Art, #660 Surrealism (turquoise); River Washed, #983 Mekong (pink).

Setts: 10 epi; 10 ppi. Shrinkage in length: 15%.

Shrinkage in width: (width in the reed to width after wet-finishing) 15%.

Surprisingly, shadow weave created a clear pattern on the gray side of the warp (shown at the left) even though it mixed four colors: dark and light gray, turquoise, and pink.



8-shaft turned taqueté

Weft: River Washed, #958 Tiber (yellow and blue).

Setts: 10 epi; 10 ppi. Shrinkage in length: 15%.

Shrinkage in width: (width in the reed to width after wet-finishing) 18%.

Weaving turned taqueté on the same Whirl -Fine Art warp with a River Washed Tiber weft created beautiful color interactions and a cloth with nice drape. Tiber, with its yellow inner thread and blue net, mixed wonderfully with both the grays of Minimalism and the turquoise of Surrealism in the warp. This sample is my favorite using the Whirl - Fine Art warp.



Pseudo-plain weave

Weft: River Washed, #958 Tiber (yellow and blue), #983 Mekong (pink).

Setts: 10 epi; 10 ppi. Shrinkage in length: 10%.

Shrinkage in width: (width in the reed to width after wet-finishing) 15%.

The parallel threading of the warp allowed for pseudo-plain weave with most of the ends lifting in an even/odd sequence, with occasional exceptions. In particular, colors in the Whirl - Fine Art warp interacted beautifully with the River Washed Tiber as weft, as exemplified in the top section of sample.



Broken point twill

Weft: River Washed, #983 Mekong (pink), #980 Narmada (gold and green); Whirl - Fine Art, #650 Minimalism (gray).

Setts: 10 epi; 10 ppi. Shrinkage in length: 6%.

Shrinkage in width: (width in the reed to width after wet-finishing) 17%.

For this sample, I changed the tie-up to weave broken point twill. The new tie-up resulted in some interesting color-and-weave effects when I used two weft colors. Although the colors in the top part of the sample, Mekong and Narmada, are quite bright and contrasting, they manage to create a unified look.



2/2 twill

Weft: Whirl - Fine Art, #650 Minimalism (gray), #660 Surrealism (turquoise).

Setts: 10 epi; 10 ppi. Shrinkage in length: 6%.

Shrinkage in width: (width in the reed to width after wet-finishing) 15%.

I wove this sample with a 2/2 twill tieup, essentially reducing the eight-shaft draft to a four-shaft draft. The use of two weft colors resulted in a color-andweave effect. I found the cloth most interesting in the half of the warp (shown here) where the dark and light grays of Minimalism alternate. The contrast between dark gray in the warp and turquoise in the weft enhances the color-and-weave effect.

WARP 2

I wove the second set of samples on a warp of River Washed in three colors threaded in three parallel threadings to create the Corris effect. I used #974 Avon, #979 Mersey, and #973 Po, all colorways with the same yellow inner thread but a different-colored net: red in Avon, orange in Mersey, and dark green in Po.



4/4 twill with tabby

Weft: River Washed, #975 Eisack (yellow and purple). Setts: 10 epi; 10 ppi.

Shrinkage in length: 15%.

Shrinkage in width: (width in the reed to width after wet-finishing) 12%.

I used a twill treadling with tabby for this sample. All four colors of River Washed (the three warp colors and one weft color) share the same inner yellow thread. Still, the clover motif is visible due to the differentcolored nets. The cloth also has a lovely drape. Of the samples woven on the second warp, this is my favorite.



3/1 twill

Weft: River Washed, #983 Mekong

(pink)

Setts: 10 epi; 10 ppi. Shrinkage in length: 15%.

Shrinkage in width: (width in the reed to width after wet-finishing) 20%.

I wove this sample with a clover motif without tabby, using a network treadling. Shrinkage in the width with this structure was significant. I particularly like how the bright pink River Washed Mekong stands out against the three warp colors.

FINAL THOUGHTS

The color-change felted knots in Whirl - Fine Art didn't cause me any problems in the warp, and none of my warp ends broke. In some of the samples, the knots are visible in the finished cloth, especially where knots coincide with floats. Due to its loose ply, the yarn splits rather easily, so threading the heddles and sleying the reed must be done with care.

Furthermore, the ends need to be finished before wet-finishing, as the loose fringe tends to untwist in water. River Washed is more sturdy and does not have these fragilities. Apart from the color-change knots in Whirl - Fine Art, I encountered very few knots in either yarn. I enjoyed working with both yarns.

The slow color changes in Whirl

– Fine Art give a nice subtle effect

in the color-and-weave samples. With River Washed on its own in the second warp, I especially enjoyed combining colorways that shared the inner-thread color but had differentcolored nets. The inner-thread color worked as a binding factor, while the net colors led to an interesting color interaction. I can see myself making shawls with Whirl – Fine Art and River Washed in the future.

BARBARA GOUDSMIT is a passionate weaver located in The Netherlands. She loves to experiment with different weave structures and yarns on her eight- and twelve-shaft floor looms. She writes about her weaving adventures on her blog: awovenworld.com.

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PROJECT DIRECTORY

| Designer/Weaver | Project | Pages | Weave Structure | Shafts | Level |
|------------------------------------|---------------------------|-------|-----------------------|--------|------------|
| Allen, Malynda | Candy Stripe Blankets | 49-51 | Twill and plain weave | 6 | All levels |
| Bhatia, Anu | Vakker Mug Rugs | 36-39 | Krokbragd | 3 | AB, I, A |
| Cox, Cynthia | Gold Rush Shawl | 52-54 | Twill | 4 | All levels |
| Crane, Patty | Broken Stripe Towel | 46-48 | Twill | 4 | All levels |
| Heyman, Deborah | Advancing by Steps | 56-58 | Twill | 8 | А |
| Jablonski, Christine | Wall of Troy Fade Napkins | 40-42 | Twill | 4 | All levels |
| Lee, Eileen | Sunset Twist | 62-64 | Twill | 8 | I, A |
| MacBride, Megan M. | A Basket of Stripes | 43-45 | Twill and basketweave | 8 | All levels |
| Newman, Cynthia, and Katzy Luhring | Big Wrap Beach Blanket | 68-70 | Twill | 4 | I, A |
| Stewart, Judy | Natural Elegance | 59-61 | Twill and plain weave | 8 | AB, I, A |

Levels indicate weaving skills, not sewing skills. AB = Advanced Beginner, I = Intermediate, A = Advanced. "All levels" includes very new weavers.

SUPPLIERS

Carr Park Artisans, (970) 481-3435, carrparkartisans.com (Lee 62-64).

Color Crazy, colorcrazy.com (Knisely

Georgia Yarn Company, handweaver .us/georgia_yarn_company.htm (Allen 49 - 51).

Gist Yarn, (617) 390-6835, gistyarn .com (Jablonski 40-42).

Great Northern Weaving, (269) 341-9752, (800) 370-7235, greatnorthern weaving.com (Bhatia 36-39).

Jagger Spun, (207) 324-4455, (800) 225-8023, jaggeryarn.com (Bhatia 36-39; Phillips 32-34).

Lunatic Fringe Yarns, (800) 483-8749, lunaticfringeyarns.com (Newman and Luhring 68-70).

Maurice Brassard et Fils, (819) 362-2408, mbrassard.com (Crane 46-48: MacBride 43-45; Phillips 32-34).

Silk City Fibers, silkcityfibers.com (Heyman 56-58).

Treenway Silks, (888) 383-7455, (303) 233-7455, treenwaysilks.com (Stewart 59-61).

Vreseis (Fox Fibre), vreseis.com (Crane 46-48)

WEBS, (800) 367-9327, yarn.com (Allen 49-51; Cox 52-54; Lee 62-64; Goudsmit 72-74).

The Woolery, (800) 441-9665, woolery.com (Crane 46-48).



Big Wrap Beach Blanket, pages 68-70

FINISHING TECHNIQUES

Twisting (or plying) the fringe

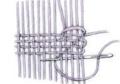


Divide the number of threads for each fringe into two groups. Twist each group clockwise until it kinks. Bring both groups together and allow them to twist around each other counterclockwise (or twist in that direction). Secure the ends with an overhand knot. (Use the same method to make a plied cord by attaching one end to a stationary object.)

Double (Italian) hemstitching

Weave several picks of plain weave (or the basic structure of the piece), ending with the shuttle on the right side if you are right-handed, the left side if you are left-handed. Measure a length of weft four times the warp width, cut, and thread this tail into a blunt tapestry needle. Take the needle under a selected group of warp threads above the fell and bring the needle back to encircle the ends. Next, pass the needle under the same ends but come up two or more weft rows down from the fell. Then bring the needle back around the same group of ends below the fell. Repeat, encircling the next group of ends.





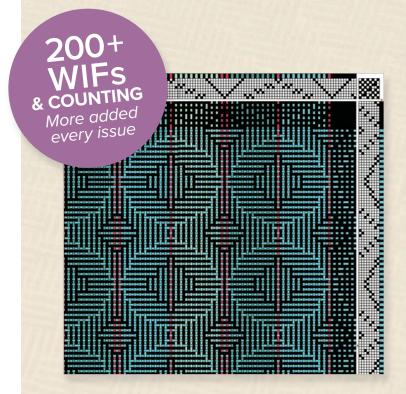
Simple hemstitching

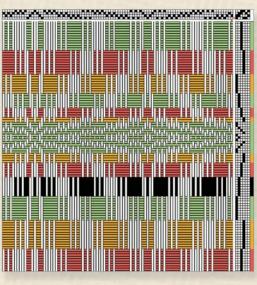
Weave several picks of plain weave (or the basic structure of the piece), ending with the shuttle on the right side if you are right-handed, left side if you are left-handed. Measure a length of weft three times the warp width and cut, leaving the measured length as a tail. Thread the tail into a blunt tapestry needle.

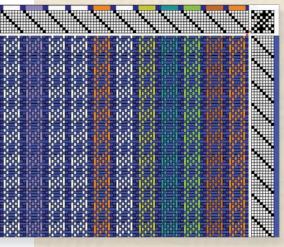


Take the needle under a selected group of ends above the fell and bring it up and back to the starting point, encircling the same group of ends. Pass the needle under the same group, bringing it out through the weaving two (or more) weft threads below the fell. Repeat for each group of ends across the fell. Needle-weave the tail into the selvedge and trim.

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Textiles for an Arctic **Adventure**

In May 2021, a young woman named Macy Cunningham commissioned me to create voyageur sashes for a canoe trip she was planning. This wasn't a simple day trip but rather a 40-day journey for seven women through the Arctic National Wildlife Refuge, beginning on the summer solstice. If "sash" makes you think of Miss America, think again. These sashes are patterned after those worn by French Canadian fur traders in the 18th and 19th centuries. The voyageur sashes I wove with a friend were warm, woolen scarves.

The women's tradition of voyageur scarves started with Camp Widjiwagan, their YMCA camp in Minnesota. The voyageur sash is a ritual at this camp: each voyageur group commissions the sashes, one for each paddler and one to leave at the camp. In this case, Macy and her friends needed eight sashes—seven for the trip and one for the camp. I began the planning process with Macy. We had each woman choose a color for one of seven warp stripes. Historically, these sashes often featured arrow motifs, so that would be our pattern as well. I had recently woven samples using Harrisville Shetland wool, so I knew its sett and shrinkage. Destiny was at work here.

I based my draft on #97 from Strickler's A Weaver's Book of 8-Shaft Patterns and added three black warp ends between each color stripe to make them more vibrant. A simple straight-



Above: The canoeists wearing their bespoke scarves; Right: One of the voyageur scarves up close

draw treadling created the arrow pattern Macy was after. To complete the eight scarves on time, I enlisted a weaving friend, Rissa Karpoff. When the yarn arrived, I wound the warps and we both began weaving, consulting one another on beat and tension to get eight identical scarves. Rissa and I coordinated by text, photos, and sharing measurements, and in the end, we could not tell the scarves apart when we got together to do the wet-finishing.

Between weaving sessions, I read more about the sashes. The voyageur sashes, or ceinture fléchée (literally, "arrow belt"), were made of wool and worn by fur traders to serve many purposes: to tie around for warmth, for support to prevent hernias when lifting several 90-pound bundles of furs, to sling around their foreheads as tumplines to carry heavy loads on their backs, to tie around their pant legs to keep dry, to store a knife or flint steel in the absence of pockets, and even to splint an injured leg. When a single thread was needed, it was pulled from the fringe. In a world with few and hard-earned possessions, something that served multiple purposes was especially prized.

Macy asked us to incorporate the stars of the Big Dipper and Polaris in



Photo by Anne Elixhauser

each scarf to reflect the Alaskan flag. Following the tradition of Indigenous peoples who added beads to their sashes, we sewed a bead star onto each scarf, labeled with the star's name. The eighth scarf that remained at camp was Polaris to guide the young voyageurs home after their trek through the Alaskan wilderness.

The scarves serve the canoeists as souvenirs of their amazing summer adventure. Later I wove one for myself as a reminder of these strong, capable, and intrepid women.

ANNE ELIXHAUSER is a retired research scientist, mom, half of Turnandweave .com, and member of the Weavers Guild of Greater Baltimore.