

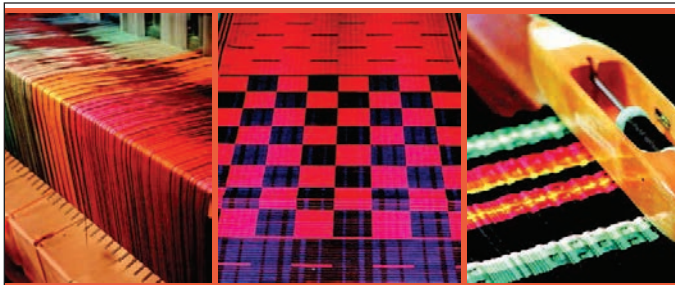


BEST OF
HANDWOVEN

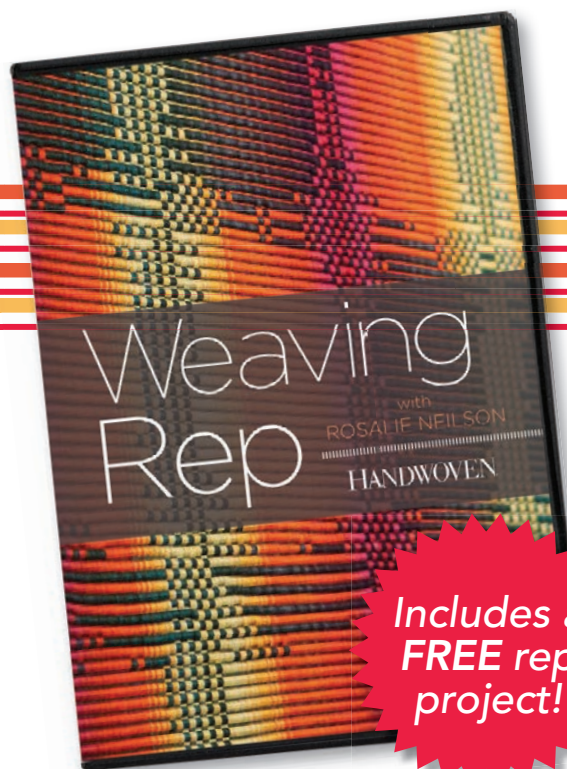
HUCK LACE

Technique Series

**THIRTEEN
LACE PROJECTS**
on Four & Eight
Shafts



Everything you need to know about **Rep Weaving**



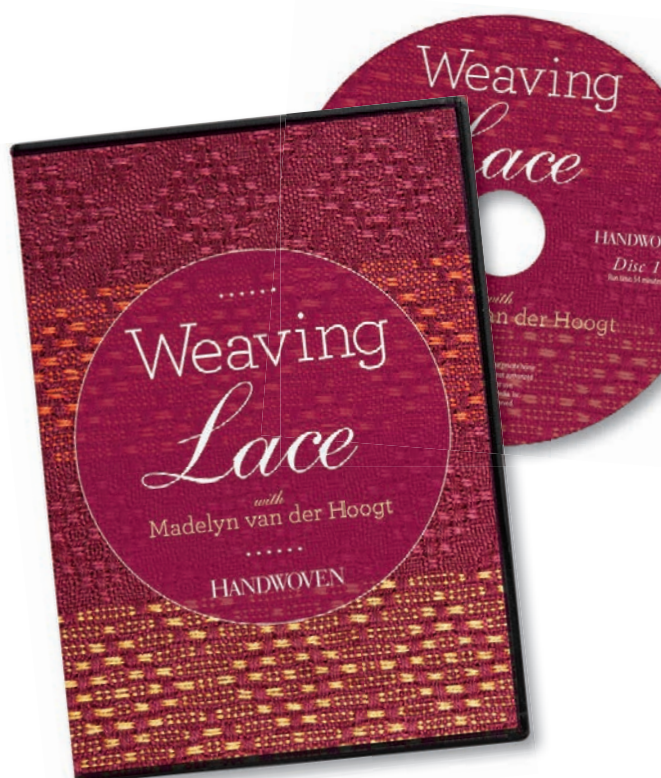
Warp-faced rep weave is a playground of vibrant color and patterning possibilities! In this 173-minute workshop video, rep weaver Rosalie Neilson teaches:

- How rep works and why it's different from other warp-faced weaves.
- How to warp rep patterns smoothly and accurately.
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- Other warp-faced options with a rep threading.
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Weave Dainty and Dazzling Lace

Learn everything you need to know about
lace weaving from Madelyn van der Hoogt



Learn how to:

- Choose the right materials for lace weaving
- Weave open, even lace structures such as huck, Atwater-Bronson, and Swedish lace
- Design your own lace patterns

Plus, gain ideas for weaving lace in color!

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Huck, huck lace, huck texture, huckaback—whatever you call this weave structure, you can't help but love what it can do. Huck is characterized by small groups of threads that can produce either warp floats, weft floats, or plain weave. As simple as that sounds, the designs and textures huck can create are unbelievably varied and complex, even on four shafts. When float blocks alternate with plain-weave blocks (known as “huck texture”), lovely circles appear in the plain-weave blocks as the threads in the float blocks slide together. Huck is well-suited to almost any fabric use (other than rugs!): in silks for scarves and garments, in linens and cottons for household textiles, and in wools for blankets and shawls. You'll find huck projects for just about all of these in this book—and you'll learn to create your own designs.

Madelyn

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Lace basics *by Madeyn van der Hoogt*

Weave structures that produce a fabric with small, regularly spaced holes are called lace weaves. In these weaves, the way the threads interlace with each other causes some of them to slide together, leaving holes between these and the other threads. The best known lace weaves are Atwater-Bronson lace and huck lace.

Atwater-Bronson lace

Atwater-Bronson lace gets its unwieldy name from Mary Meigs Atwater and J. and R. Bronson. The Bronsons (weavers in the 1800s) are credited with introducing spot Bronson, a non-lace weave (no holes!) with paired weft floats. Mary Meigs Atwater added a single warp thread on shaft 2 between the weft-float groups of spot Bronson, creating lacy spaces. The result is quite unlike spot Bronson and should probably be called Atwater lace!

Atwater-Bronson lace is a block weave (a weave structure that can produce two different-looking interlacements, one that we identify as pattern, one that we identify as background).

The threading for Block A in Atwater-Bronson lace is shown in **Figure 1a**. Each unit of 6 warp threads and 6 weft threads can either weave plain weave or produce floats to create lace. To weave plain weave, threads on shaft 1 (every other thread throughout) are raised alternately with the threads on all the other shafts. To produce weft floats, the “pattern” shaft (3) is down and only shaft 2 is raised for the 2nd and 4th picks (the “pattern” picks). The weft floats span 5 warp threads and interlace only with the 6th warp thread on shaft 2.

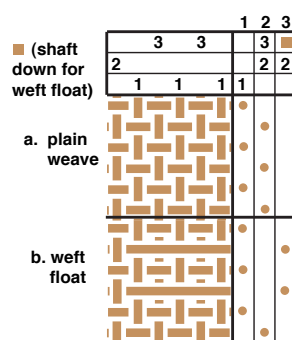
Figure 1b shows two blocks of Atwater-Bronson lace. In the first treadingling sequence, Block A produces weft floats (3 is down in the 2nd and 4th picks); Block B weaves plain weave (4 is up). In the second treadingling sequence, the opposite happens in each block (3 is up and 4 is down for the 2nd and 4th picks).

In **Figure 1c**, both blocks produce weft floats for two treadingling repeats. Notice how the groups of 5 warp threads and 5 weft threads slide

Atwater-Bronson lace

1a. One block

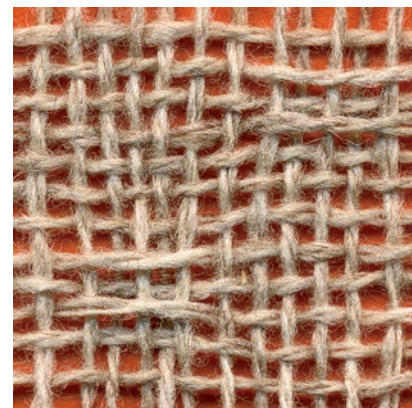
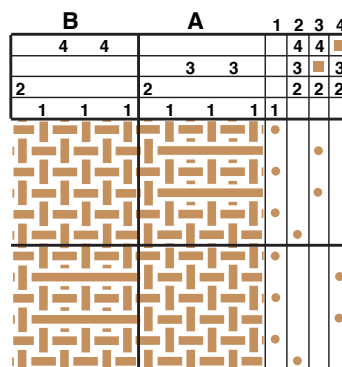
Plain weave or weft floats



Atwater-Bronson lace

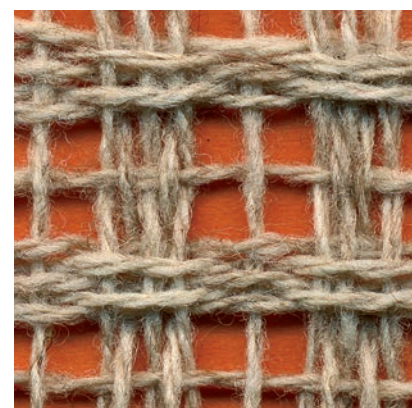
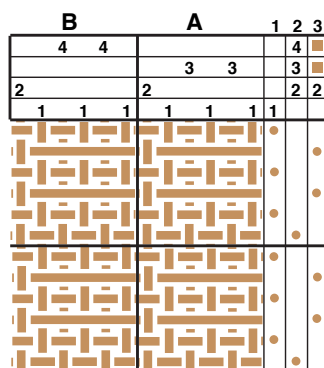
1b. Two blocks

Plain weave alternates with weft floats



1c. Two blocks

Weft floats in both blocks



together in each block. The single warp thread on shaft 2 stands alone in the center of the space they leave as does also the single weft thread (with shafts 2-3-4 raised). These 2 threads form the + in the hole that is characteristic of Atwater-Bronson lace. (The hole only occurs when a float block is repeated in both warp and weft directions—almost no sliding takes place if a block producing weft floats is adjacent to a block weaving plain weave; see the fabric in **1b**).

Huck texture and huck lace

Figure 2a shows a draft for two blocks of huck; each block contains 5 warp threads and 5 weft threads. In the threading, an odd pattern shaft (3 here) alternating with shaft 2 is always followed by an even pattern shaft (4 here) alternating with shaft 1. In the first 5 picks in **2a**, Block A produces weft floats in the 2nd and 4th picks; Block B weaves plain weave. In the second 5 picks, Block A weaves plain weave; Block B produces weft floats in the 2nd and 4th picks. When float and plain-weave blocks alternate, the plain-weave threads form little circles in the fabric; see the fabric with **2a** and the cloth at bottom right.

To create lacy holes—just as with Atwater-Bronson lace—two float blocks must be repeated in both warp and weft directions (see **Figure 2b** and the resulting fabric). Warp and weft threads slide away from the place where the four float groups meet, forming *empty holes* (no +!), visually distinguishing huck lace from Atwater-Bronson lace. The interlacement in **2b** is usually called huck lace, while the interlacement in **2a** is usually called huck, huckaback, or huck texture. Both interlacements can be combined in the same cloth as in the fabric shown at bottom right.

To weave weft floats, the pattern shaft for a block must be down for the 2nd and 4th picks (notice that shafts 3 and 4 are missing from the pattern treadles in **2a** and **2b**); for warp floats, it must be raised for the 2nd and 4th picks (notice that shaft 3 is added to one pattern treadle, shaft 4 to the other in **2b**).

When huck lace is used as a unit weave with profile drafts in which one block is threaded in succession, each block must consist of a full structural unit, i.e., Block A is in this case 2-3-2-3-2-1-4-1-4-1; Block B becomes 2-5-2-5-2-1-6-1-6-1.) This is because two groups of 2-3-2-3-2, for

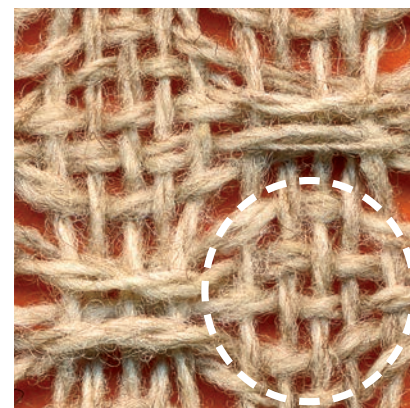
Huck texture and huck lace

2a. Two blocks

Plain weave alternates with weft floats

B			A				
4	4					4	■
			3	3	3	2	■
			2	2	2	1	2
1	1	1				1	1

■ (shaft down for weft float)



Huck texture

2b. Two blocks

Weft floats alternate with warp floats

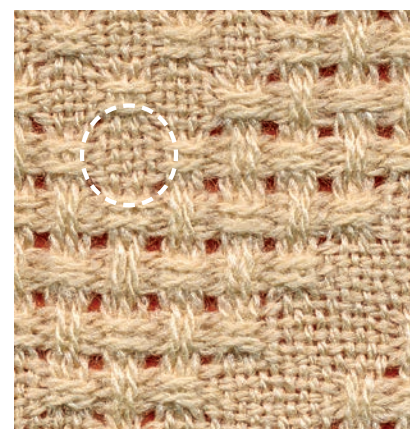
B			A				
4	4					4	4
			3	3	3	2	3
			2	2	2	1	2
1	1	1				1	1

■ (shaft down for weft float) 3 or 4 (shaft up for warp float)



Huck lace

Huck lace and huck texture



example, cannot be threaded adjacent to each other. In the block order on page 4 (A-B-C-D-E-F-E-D-C-B-A), this never happens; in this case, each half-unit can act as a single block. In huck lace, the structural requirement is that a group threaded 1-O-1-O-1 must always alternate with a group threaded 2-E-2-E-2 (O = any odd pattern shaft; E = any even pattern shaft).

Other lace weaves

Other structures and techniques can create lacy fabrics. For information about canvas weave, Swedish lace, and Atwater-Bronson lace, as well as more about huck lace, see Resources, page 6.

Designing huck lace by Madelyn van der Hoogt

An exciting way to create multishaft huck-lace designs is to think of huck “half units” as blocks. If 2-3-2-3-2 is followed by 1-4-1-4-1, either of the 5-thread groups can produce plain weave or floats; each half unit therefore acts as an individual block (Blocks A and B, for example). The threading in **Figure 2**, page 4, provides six blocks on eight shafts. Many other threading orders of these blocks/half units can be arranged. The only rule is that an odd pattern shaft alternating with shaft 2 in a block must always alternate with a even pattern shaft alternating with shaft 1; i.e., any 2-O-2-O-2 can alternate with any 1-E-1-E-1 (O = odd pattern shaft; E = even pattern shaft). Therefore, a block with shaft 2 cannot be threaded adjacent to another block with shaft 2; a block with shaft 1 cannot be threaded adjacent to another block with shaft 1.

The same restriction exists in the treadling. A block that begins and ends with the even tabby (2-4-6-8) can never be treadled adjacent to another block that begins and ends with the even tabby; a block that begins and ends with the odd

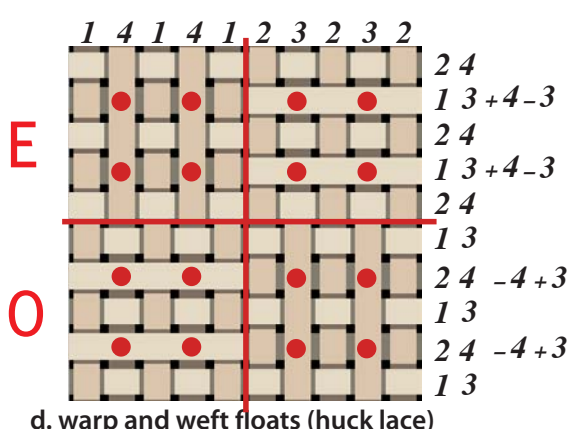
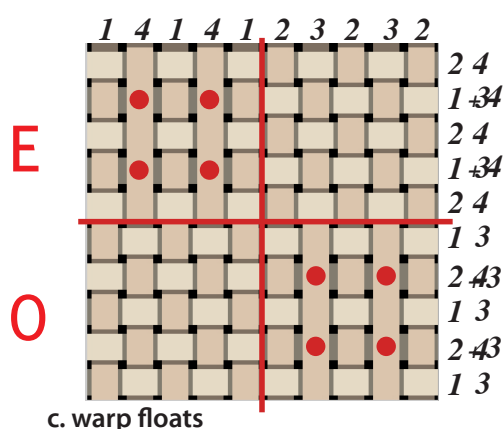
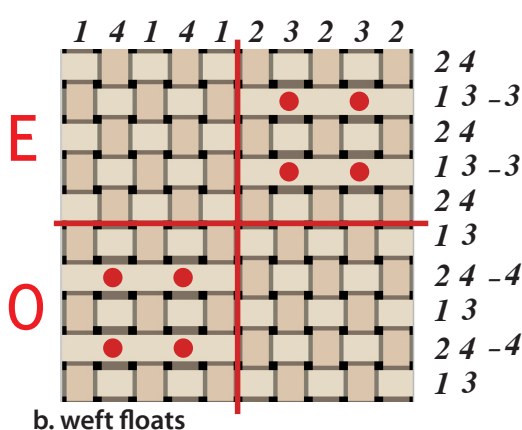
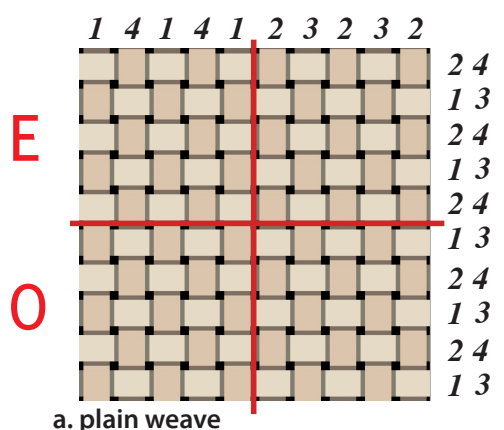
tabby can never be treadled adjacent to another block that begins and ends with the odd tabby.

How huck works

To repeat the basic rule: In huck lace, a group of 5 ends threaded 2, odd pattern shaft, 2, odd pattern shaft, 2 always alternates with a group of 5 ends threaded 1, even pattern shaft, 1, even pattern shaft, 1. Each 5-thread group can produce lace (warp or weft float) or plain weave.

A sequence of 5 picks beginning and ending with an even tabby is always followed by a sequence of 5 picks beginning and ending with the odd tabby. I like to think of these two alternating 5-pick groups as an even (E) pattern row vs an odd (O) pattern row. (The version of huck used as an example here is often called 5-thread huck. All the same rules apply for 3 thread huck—2-O-2, 1-E-1—and 7-thread huck—2-O-2-O-2-O-2, 1-E-1-E-1-E-1. Three-thread and 7-thread huck operate in exactly the same way as 5-thread huck, only with more or fewer warp and weft threads.)

1. Huck interlacements



2. 8-shaft threading

A	B	C	D	E	F	E	D	C	B	A
				7 7	8 8	7 7				
			6 6				6 6			
		5 5						5 5		
	4 4								4 4	
3 3										3 3
2 2 2		2 2 2		2 2 2		2 2 2		2 2 2		2 2 2
	1 1 1		1 1 1		1 1 1		1 1 1		1 1 1	

In any sequence of 5 picks, weft floats are created by subtracting a pattern shaft from the shed that would otherwise produce plain weave in the 2nd and 4th picks; see **Figure 1b**; think weft float equals a minus (-) sign. A pattern shaft creates a warp float by being added to the shed that would otherwise produce plain weave; see **1c**; think warp float equals a plus (+) sign. See **1d**: shafts are subtracted for weft floats and added for warp floats.

Designs can be created and tie-ups constructed by working with a design grid instead of individual threads. In fact, once you start, you'll find a point threading of the blocks on eight shafts provides enough designing fun for a weaving lifetime (designs can also be planned this way for other threading orders of the blocks).

The design grids used below represent the threading in **Figure 2**. (Note that if this threading is repeated over and over, the last Block A would not be threaded until the last repeat: [A-B-C-D-E-D-C-B] is repeated, ending with a final A to balance). Each square on the design grid in **Figure 3** represents 5 warp threads and 5 weft threads. The number at the top of each column in the grid represents the “pattern” shaft for the corresponding block

(3 for 2-3-2-3-2, for example). The E or O at the left edge of each row indicates whether or not the 1st, 3rd, and 5th picks of the group of 5 picks is an even tabby (E) or an odd tabby (O). The numbers listed horizontally at the right of each row are the shafts that would be raised by the “pattern” treadle (2nd and 4th picks) if all blocks were to weave plain weave. To change a block to lace, add (+) a shaft for a warp float, subtract (-) a shaft for a weft float.

Look at the top row in the first design in **3**. Shaded marks appear under the 3, 5, and 6. The vertical or horizontal lines in the grid indicate whether a warp float or a weft float *can* be created in the group of 5 threads (alternate rows can create the opposite floats). Subtract (-) the 3 and the 5 from the pattern treadle; add (+) the 6. If you were to weave that row, you'd weave: even tabby, the pattern treadle you just created, even tabby, the same pattern treadle, even tabby.

See if you can complete the second design and check your work on the next page. Then have fun creating new designs, deriving the pattern treadles needed, and consider trying them out in a sampler.

3. Sample designs

Figure 1 displays the sequence of moves for the 10-disk Tower of Hanoi problem. The grid shows the sequence of moves for the optimal solution, with columns labeled 3, 4, 5, 6, 7, 8, 7, 6, 5, 4, 3 and rows labeled E, O, E, O, E, O, E, O, E, O. To the right of the grid are three tables: a sequence of moves (1, 2, 3, 4, 5, 6, 1, 2, 3, 4, 5, 6, 1, 2, 3, 4, 5, 6, 1, 2, 3, 4, 5, 6), a table of disk numbers (1, 2, 3, 4, 5, 6, 1, 2, 3, 4, 5, 6, 1, 2, 3, 4, 5, 6, 1, 2, 3, 4, 5, 6), and a table of origin/destination (O, E, O, E, O, E, O, E, O, E).



Answer for Sample Design, page 4

	3	4	5	6	7	8	7	6	5	4	3	
E	-		-	-	-	-	-	-	-	-	-	I 3 4 5 7 8
O	-	-	-	-					-	-	-	2 3 4 6 7 8
E	-	-	-	-	-	-	-	-	-	-	-	I 3 4 5 6 7
O	-				-	-	-	-	-	-	-	2 4 5 6 8
E	-			-	-	-	-	-	-	-	-	I 3 4 5 7 8
O	-	-	-	-	-				-	-	-	2 3 4 6 7 8
E	-			-	-	-	-	-	-	-	-	I 3 4 5 7 8
O	-	-	-	-	-	-	-	-	-	-	-	2 4 5 6 8
E	-	-	-	-	-	-	-	-	-	-	-	I 3 4 5 6 7
O	-			-	-	-	-	-	-	-	-	2 3 4 6 7 8
E	-			-	-	-	-	-	-	-	-	I 3 4 5 7 8

1	2	3	4	5	6	O	E
8			8	8	8		8
	7	7		7	7	7	
	6	6			6		6
5			5	5		5	
4	4		4	4			4
3	3	3			3	3	
	2		2		2		2
1		1		1		1	

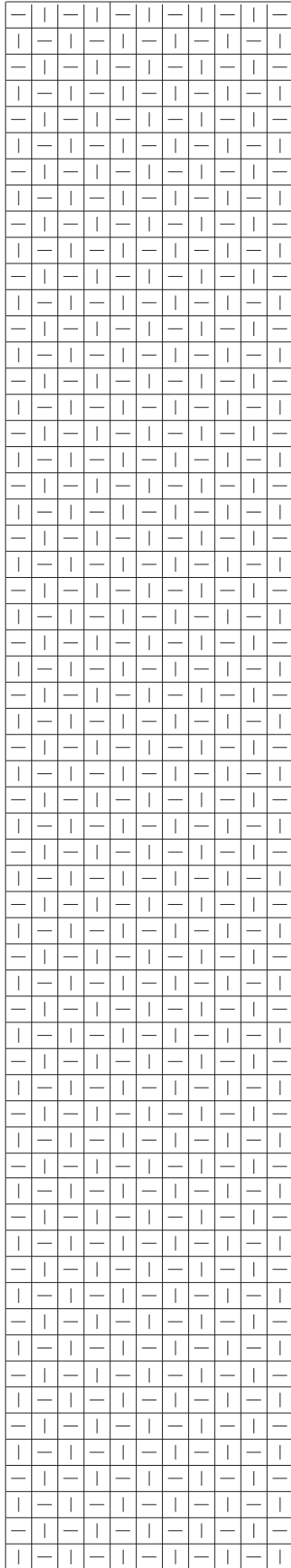
DESIGN PRACTICE

[illegible][illegible]

O	E
7	8
5	6
3	4
1	2

[illegible][illegible]

O	E
7	8
5	6
3	4
1	2



Resources for lace weaves

- Alderman, Sharon. *Mastering Weave Structures*. Loveland, Colorado: Interweave Press, 2004. The Distorted Grid, Chapter 5, gives drafts and design tips for lace weaves, including leno and canvas weave.
- Bress, Helen. *The Weaving Book*. New York: Scribner's, 1981. Huck, Chapter 5 (pages 437–538), gives extensive drafting theory for huck lace with many unusual variations and includes ways to extend huck to more than four shafts.
- Davison, Marguerite Porter. *A Handweaver's Pattern Book*. Swarthmore, Pennsylvania, 1977. Swedish Lace Weave, Chapter XI, gives drafts and photos of fabrics for variations of Swedish lace used in Europe, Scandinavia, and the United States.
- Keasbey, Doramay. *Designing with Blocks for Handweavers*. Eugene, Oregon: Doramay Keasbey, 1993. Design techniques for huck blocks, pp. 67–69.
- _____. *Pattern Techniques for Handweavers*. Eugene, Oregon: Doramay Keasbey, 2005. Gives drafting basics for pattern in huck, huck lace, and Atwater-Bronson lace.
- Knisely, Tom, with Lynette Beam. "Soy Silk: A Scarf's Best Friend." *Handwoven*, January/February 2005, pp. 32–34.
- Morrison, Ruth. "A Huck Pattern Book," *Best of Weaver's Huck Lace*. Sioux Falls, South Dakota: XRX-Inc, 2000, pp. 12–16.
- Muller, Donna. *Handwoven Laces*. Loveland, Colorado: Interweave Press, 1991. Gives drafting steps for all lace weaves and includes canvas weave and basketweave.
- Strickler, Carol, ed. *A Weaver's Book of 8-Shaft Patterns*. Loveland, Colorado: Interweave Press, 1991. Atwater-Bronson Lace, Spot Bronson, and Huck and Huck Lace (Chapters 19, 20, and 21) cover drafting formats and using the three structures with profile drafts.
- Tardy, Vicki. "Swedish Lace Towels," *Handwoven*, January/February 2006, pp. 36–39, and *Best of Handwoven*, Top Ten Dish Towels on Four Shafts (ebook): Loveland, Colorado, Interweave Press, 2013.
- Tedder, Lynn. "Stuck on Huck," *Best of Weaver's Huck Lace*. Sioux Falls, South Dakota: XRX-Inc, 2000, pp. 6–9.
- van der Hoogt, Madelyn, ed. *Best of Handwoven: Atwater-Bronson Lace* (ebook), Loveland, Colorado, Interweave Press, 2010.
- _____, ed. *Best of Weaver's Huck Lace*. Sioux Falls, South Dakota: XRX, 2000. Includes projects with drafting and designing theory for huck lace, multishaft Swedish lace, and Atwater-Bronson lace.
- _____. *The Complete Book of Drafting for Handweavers*. Petaluma, California: Shuttle-Craft Books, 1993. Understanding Lace Weaves, Chapter 6, covers drafting theory with complete steps for using Atwater-Bronson and huck lace with profile drafts. Craft Books, 1993.
- _____. "The Way Huck Works," *Best of Weaver's Huck Lace*. Sioux Falls, South Dakota: XRX-Inc, 2000, pp. 10–11.

Wool and lace poncho *by Rita Hagenbruch*

Draft



Although ponchos fit loosely, they hang best if they are designed to fit the person who'll wear them. Here's a great way to size a poncho: Get a large piece of paper or poster board. Measure the distance from one shoulder to the other of the designated poncho wearer. Draw a line this length as the base of a triangle across one corner of the paper so that both of the paper "sides" that connect the corner with the line are the same measurement. The "side" measurement will be "x." For example, the shoulder measurement for this poncho is 15". With 15" as the base, the equal (paper) sides of the triangle are 10⁵/₈" each.

Now measure the poncho wearer's arm length from shoulder to wrist (sleeve length), 20" for this poncho. This measurement will be "y."

Use the following equation to plan the width of the warp in the reed: Width in the reed = $x + y$ + allowance for draw-in and shrinkage. For a sleeve length (y) of 20", therefore, width in the reed = $10\frac{5}{8}" + 20 + 2"$ (draw-in and shrinkage) = $32\frac{5}{8}"$.

For warp length, use this equation: Warp length = 2 times the width in the reed + 2 times **x** + allowance for take-up and shrinkage + loom waste. For this poncho, therefore, warp length = 2 times 32½" + 2 times 10⅝" + 8" (take-up and shrinkage) + 24" (loom waste) = 118½".

An additional consideration if you are planning a plaid is to make sure the color repeats place the plaid squares so they are centered when they become diamonds in the finished poncho. When I am planning any garment in plaid, I usually allow extra warp length since I may need it for matching the plaid at the seams.

The design for this poncho (see poncho construction details **a-c**, page 9) places the fringe along the diagonal from the neckline to one side. This flattering line also makes the fringe less likely to get caught in a school locker or car door.

Warp color order

					9x							
20	2				2				Lady Slipper Bluegrass Aubergine			
80	2	2	2	2	2	2	2	2				
294	6	4	2	2	4	18	4	2		2	4	6
394												



As a garment, the poncho is a perfect fashion for handwoven fabrics. It allows you to keep your hands free, yet it doesn't fall from your shoulders like a shawl. Follow the directions given here for a poncho like this one or use them as a springboard for your own design.

Fabric description Huck lace and plain weave.

Finished dimensions

Yardage 29" by 82" plus 4" fringe at each end.

Warp and weft

2-ply wool at 1,800 yd/lb (Harrisville Shetland), 1,850 yd Aubergine, 490 yd Bluegrass, and 125 yd Lady Slipper.

Total warp ends 394.

Warp length

3½ yd (allows for take-up and 36" loom waste with allowance for matching plaids).

E.P.I. 12. Width in reed 32⁵/₆". P.P.I. 12.

Take-up and shrinkage 11% in width and length.



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Weaving

Warp the loom following the Warp Color Order and the Draft on page 7. Weave the fabric at a consistent 12 ppi following the treadling in the draft for 86". Hemstitch over the first and last 2 weft rows including 3 warp threads in each stitch (4 in the last stitch). Begin and end the Bluegrass and Lady Slipper wefts as you go, but carry the Aubergine weft up the selvedge.

Finishing

Cut the fabric from the loom allowing 8" fringe at each end and prepare a twisted fringe using 6 threads (two groups of 3) in each fringe (one group of 4 in the last fringe); secure with an overhand knot.

Fill the washing machine with warm water and a small amount of Orvus Paste. With the machine off, soak the fabric for 20 minutes. Agitate the cloth in the washer with your hands until it feels soft (if you full the fabric too much the lace holes will disappear completely and the poncho will lose some of its drape). Spin the water out on a gentle cycle, remove the cloth, refill the washer with warm rinse water, and then place the cloth back in the water. Spin again on a gentle cycle and repeat this rinse process until no soap residue remains. Lay the fabric flat or over a rod to dry and then press with a warm iron.

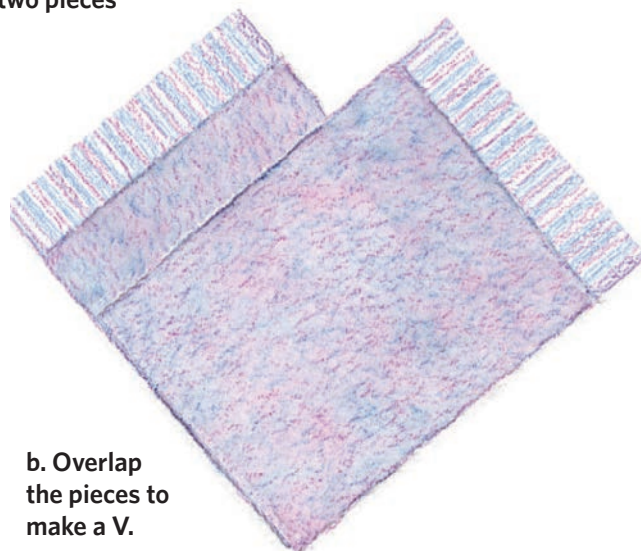
To construct the poncho: Machine stitch two lines across the center of the fabric and cut between them to make two panels (see **a**). Lay one panel over the other (see **b**). Fold the fringe end of the back panel over the edge of the front panel and the fringe end of the front panel to the back (see **c**), matching the plaids. Stitch to join the panels along the fringe edges. Machine stay-stitch $\frac{3}{4}$ " away from this seam on each excess fabric flap inside. Cut away the flap beyond this stitching and save for neck facings (if desired).

Measure the circumference of the wearer's head and cut the top corner for a neck opening to fit. Stay-stitch the opening. To finish the opening, sew on and turn facings or knit or crochet a trim.

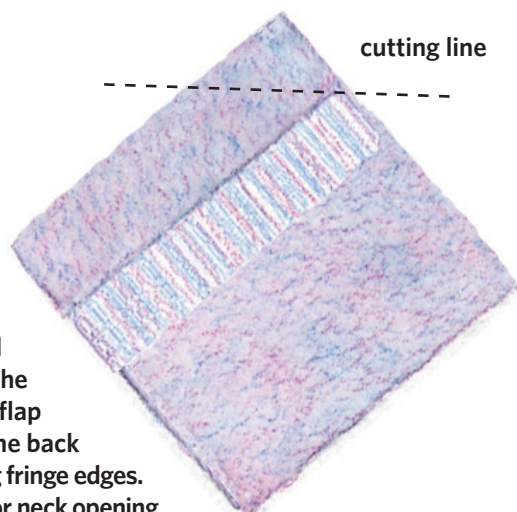
Constructing the poncho



a. Cut the fabric into two pieces



b. Overlap the pieces to make a V.



c. Fold the back fringe and the flap forward to cover the front panel; fold the front flap and fringe back to cover the back panel. Stitch together along fringe edges. Cut across the top corner for neck opening.

Bath set in comfy cotton by Karen Tenney

Using environmentally sustaining yarns is fast becoming a goal for many weavers. These washcloths are woven in a lovely new eco-friendly cotton, available in many colors. Because the large bath sheets would be expensive if they were woven in the currently available eco-cottons, a much less expensive soft 4-ply cotton is used here.

The same draft is used for both fabrics—a waffle-weave treadling variation on a huck threading; see Resources. To add heft to the washcloths, the eco-cotton is doubled in the weft. The towel hems are woven with the fine eco-cotton as weft to reduce bulk, and the accent thread in the washcloth is a single unplied strand of the 4-ply towel cotton.

Towels

Fabric description

Waffle weave on a huck threading.

Finished dimensions

Two hemmed towels 34" by 62" each.

Warp and weft

Warp: 4-ply cotton at 787 yd/lb (Peaches & Crème, Cotton Clouds), 2,420 yd #23 Pastel Blue.

Weft: Peaches & Crème, 1,615 yd #23 Pastel Blue; 120 yd #01 Pale Neutral. Organic unmercerized 2-ply cotton at 7,000 yd/lb (Ecocot, Cotton Clouds), 280 yd #01 Pale Neutral for hems.

Total warp ends 440.

Warp length

5½ yd (allows for take-up and 24" loom waste; loom waste includes fringe).

E.P.I. 10.

Width in reed 44".

P.P.I. 8½ (Peaches and Crème), 13 (Ecocot)

Take-up and shrinkage

About 23% in width and length.

Weaving

Warp the loom using your preferred method and weave the two towels following the treadling in the Draft. Make weft changes with Peaches and Crème using Treadle 1 (no floats) Cut the plies at the ends of the joining yarns at different

Draft for towels



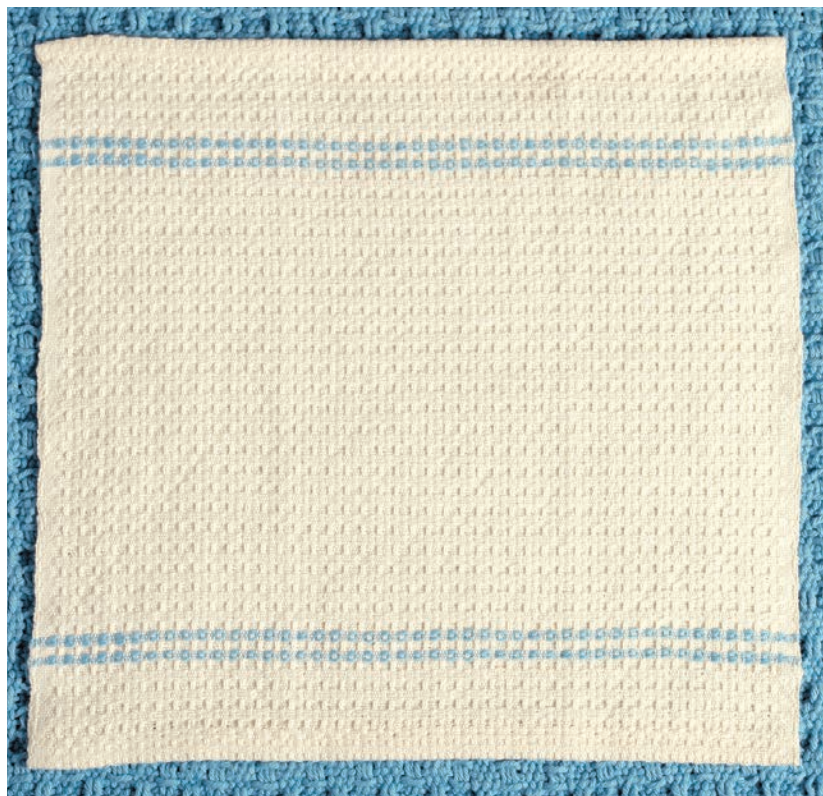
lengths for a smooth overlap. Separate towels with 1-2 picks of a contrasting color.

Finishing

Remove the fabric from the loom and machine zigzag both ends of each towel; cut towels apart. Machine wash and dry. Turn ends twice and machine sew hems. (Note that take-up and shrinkage is about twenty-five percent.)

Resources

Tedder, Lynn. "Stuck on Huck." *The Best of Weaver's: Huck Lace*, Madelyn van der Hoogt, ed. Sioux Falls, South Dakota: XRX Books, 2000, p. 8.



Choose from a wide range of colors in Peaches and Crème to coordinate with your bathroom decor. The towels are very soft and very absorbent; the washcloths have an ideally textured surface for bathroom use.

Draft for washcloths

5x 4x 5x
 4 4 4 4
 3 3
 2 2 2 2
 1 1 1 1 1 1 1 1
 plain weave

- = 1 ply Peaches & Crème Pastel Blue
- = 1 strand Ecocot
- ⌘ = 2 strands Ecocot

1½"
 2"
 23x
 2"
 1½"

Washcloths

Fabric description

Waffle weave on a huck threading.

Finished dimensions

Four hemmed washcloths 12½" by 11¾" each.

Warp and weft

Warp and weft: organic unmercerized 2-ply cotton at 7,000 yd/lb (Ecocot, Cotton Clouds), 2,340 yd #01 Pale Neutral (used doubled in the weft).

Accent weft: unmercerized 4-ply cotton at 787 yd/lb (Peaches & Crème, Cotton Clouds), 16 yd #23 Pastel Blue, separated into single strands.

Total warp ends 436.

Warp length

2¾ yd (allows for take-up and 30" loom waste).

E.P.I. 32.

Width in reed $13\frac{5}{8}"$.

P.P.I. 24 (doubled strands).

Take-up and shrinkage

10% in width and length.

Weaving

Warp the loom using your preferred method. Wind 1 bobbin with 2 strands of Ecocot cotton for the body of the cloths and another with 1 strand for the hems. (To wind a bobbin with a doubled weft, place one cone beneath a surface with a hole in it—I use an IKEA step stool.) Bring the yarn from the cone up through the hole and through the center of a second cone placed on top of the hole.) Wind a third bobbin with a single ply of the 4-ply Pastel Blue Peaches & Crème yarn. (To separate Peaches & Crème into single plies: Cut a 4 yd length. Separate the four plies into two strands of two. Then separate these into singles. As you gently pull the strands apart, keep a bit of tension on the other end, releasing as needed.)

Weave the four washcloths following the treadling in the Draft. Separate washcloths with 1-2 picks of a contrasting color. Carry the Ecocot weft along the selvage when you are weaving with the Peaches & Crème. Separate washcloths with 2 picks of a contrasting color.

Finishing

Machine zigzag both ends of each washcloth and cut apart. Before hemming, machine wash and dry as you would any bath linens. Then press and turn under $\frac{3}{8}$ ", then $\frac{1}{2}$ ", and sew hems by machine.



Soy silk scarf *by Tom Knisely with Lynette Beam*

Soybean protein fiber has been produced for some time. It is said, in fact, that Henry Ford had a suit made from it when he visited Japan prior to World War II. We are fortunate that the fiber is now available to handweavers and handspinners under the trademark name Soy Silk. The 16/2 Soy Silk used in this scarf looks and behaves very much like 10/2 cotton—in fact, you can use 10/2 cotton or 10/2 Tencel for this scarf and follow the same directions as for the Soy Silk.

16/2 Soy Silk is available in white and natural, but it dyes beautifully with acid and natural dyes. This scarf was washed in hot water to encourage the lacy holes to open; the result is a very soft and drapable fabric hand.

Fabric description Huck lace and plain weave.

Finished dimensions

One scarf 8½" by 59" plus 4½" fringe at each end.

Warp and weft

16/2 Soy Silk at 6,400 yd/lb (Infinity, The Mannings),
1,070 yd white.

Total warp ends 240.

Warp length

2½ yd (allows for take-up and 23" loom waste; loom waste includes fringe).

E.P.I. 24. Width in reed 10". P.P.I. 24.

Take-up and shrinkage 15% in width, 10% in length.

Weaving

Thread the shafts following the Draft. Weave a heading in plain weave with scrap yarn. Begin weaving the scarf with 16/2 Soy Silk allowing 7" of warp length for fringe (including the heading and the amount used to tie on to the front apron rod). Weave $\frac{1}{2}$ " plain weave. Then weave following the lace treadling repeat in the Draft for 63" and end with $\frac{1}{2}$ " plain weave. Aim for exactly the same number of picks per inch as warp threads per inch (24). To keep the weft from packing in too densely, beat gently on a closed shed. (If the warp threads that float in the lace areas become loose, raise shafts 3 and 4 and place a rod under the raised threads behind the shafts and slide it over the back beam to rest under the warp beam. Add weight to the rod if necessary to equalize warp tension.

Finishing

Remove the scarf from the loom. Remove the scrap yarn from the beginning and trim the fringe evenly to 6" on both ends. Prepare a twisted fringe including two groups of 12 ends in each fringe and secure the ends with an overhand knot.

Wash the scarf by hand in hot water with a small amount of mild soap or Orvus Paste. Rinse well in hot water, lay flat to dry, and press with an iron on a cotton setting. Trim the tails of the fringe if necessary.

Draft

┌23x┐													┌11x┐													┌12x┐													1	2	3	4																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													

Heddle count

<u>16</u>	shaft 4
<u>16</u>	shaft 3
<u>104</u>	shaft 2
<u>104</u>	shaft 1
240	



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Huck lace and Tencel by Kristin Kelley

I chose to weave these scarves in Tencel mainly because of its eco-friendly nature—but also because it is easy to care for and takes dye beautifully. Weaving an entire project in a single color can be monotonous, but the sheen and depth of color in Tencel makes this scarf a joy to weave.

Your scarf might feel stiff when it comes off the loom, but with wet finishing and a cycle through the dryer (on low heat!), it softens up beautifully. Tencel also sheds wrinkles—hang your scarf up in a steamy bathroom and it will shed any wrinkles that packing and/or wearing might cause.

This scarf is woven in lengthwise stripes alternating 5-end huck lace (5 ends in each half-unit) with plain weave. The sections of plain weave between the lace stripes not only stabilize the cloth, but make it easy to achieve an even beat.

In 5-end huck lace, for every group of 5 warp and 5 weft threads, 2 threads float (warp floats on one side, weft floats on the other) and 3 threads weave plain weave. The alternating groups of 5 threads form little checkerboards. When the cloth is removed from the loom and wet finished, the yarns move—softening and curving to create a lovely airy pattern.

Put on enough warp for more than one scarf (allow 3 yards per scarf for a final scarf length of 73" plus fringe). You can alter the treadling to intersperse sections of plain weave with the lace areas and create rectangular or square windows of lace. (You'll need to cut off and tie back on between pieces to adjust warp tension since the warp threads that float in the lace areas will become looser than the others.)

Allowing extra warp for experimenting is an excellent step towards designing your own pieces. Ideas will occur to you as you weave—more will come with each piece.

Fabric description

Huck lace and plain weave.

Finished dimensions

One scarf 8" by 73" plus 5" twisted fringe at each end.

Warp and weft

8/2 Tencel (Webs) at 3,360 yd/lb,
1,140 yd Lemongrass or Amethyst.

Total warp ends 200.

Warp length

3¼ yd (allows for take-up and 31" loom waste; loom waste includes fringe).

E.P.I. 20. Width in reed 10".

P.P.I. 20.

Take-up and shrinkage 20% in width, 10% in length.

Weaving

Using either Lemongrass or Amethyst, wind the warp and thread the shafts following the draft. Allowing about 8" of warp length for fringe at each end, begin with a few picks of scrap yarn in plain weave. With Tencel weft, weave 1" plain weave, 78" lace, and 1" plain weave. End with a few picks of plain weave in scrap yarn.

Finishing

Removing the scrap yarn as you go, prepare a twisted fringe on both ends. (Since I have little patience for twisting fringe, my fringes are pretty thick; you can include fewer threads per fringe): Twist two groups of 5 ends each separately in the same direction until they kink; then twist them together in the opposite direction and secure with an overhand knot.

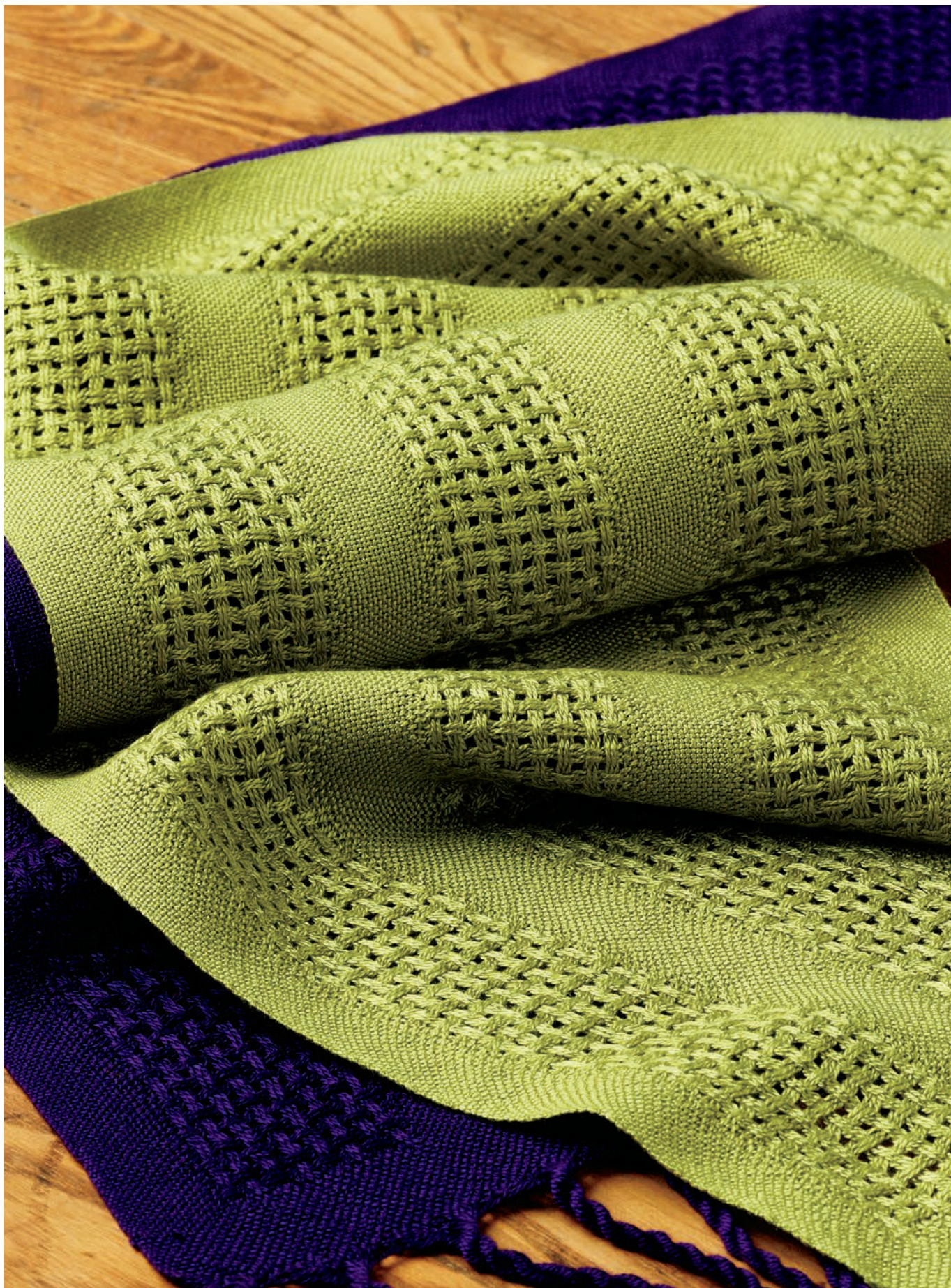
Wash the scarf by hand in cool to lukewarm water using a mild detergent (Dawn works wonderfully and so does my children's Johnson & Johnson's lavender-scented bubble bath). Rinse well and wrap in a towel, pressing out the excess water. Tumble dry on delicate/low heat with a towel until only slightly damp. Hang or lay flat to finish drying. Press with the iron on a rayon setting and trim fringe close to the knots.

Resources

Alderman, Sharon. *Mastering Weave Structures*. Loveland, Colorado: Interweave Press, 2004, p. 98.

Draft

[illegible]



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Spot-weave scarf in sock yarn *by Barbara Walker*

The weave structure for this scarf is not huck lace, but it is very, very similar. Huck is a subset of a weave-structure category called “spot weaves.”

This weave is known only as a spot weave. The threading groups in huck each contain an uneven number of warp threads and weft threads (3, 5, or 7, usually). In this variation of spot weave, the groups that produce floats contain an even number of warp and weft threads—6 each.

“Spots” are floats that are produced on a plain-weave background when alternate warp and weft threads skip one or more of their plain-weave interlacements. When this happens, a warp float occurs on one side of the cloth—a warp spot—and a weft float on the other—a weft spot.

In the scarf, the space-dyed yarn shows as warp floats, the solid blue yarn as weft floats on both faces.

Fabric description

Spot weave (plain weave with warp and weft floats).

Finished dimensions

One scarf 6¾" by 60½" plus 5" twisted fringe at each end.

Warp and weft

Warp: fingering-weight sock yarn, 45% cotton, 40% superwash wool, 15% nylon (Sockotta by Reynolds), at 1,878 yd/lb, (414 yd/100g ball), 312 yd color #15. Fingering-weight yarn, 75% superwash wool, 25% polyamid (Fortissima by Skacel), at 2,060 yd/lb (230 yd/50g ball), 30 yd color #04.

Weft: fingering-weight yarn (Fortissima), 225 yd color #04. This project requires 1 ball Sockotta and 2 balls Fortissima. Substitute any fingering-weight yarn (note that wools that are not superwash will shrink and full with wet finishing).

Total warp ends 114.

Warp length

3 yd measured under tension on the warping board (allows for considerable take-up and 31" loom waste; loom waste includes fringe).

Warp color order

4x		
104	26	Sockotta
10	2	Fortissima
114		

E.P.I. 15.

Width in reed 7⅜".

P.P.I. 14.

Take-up and shrinkage 12% in width, 17% in length.

Weaving

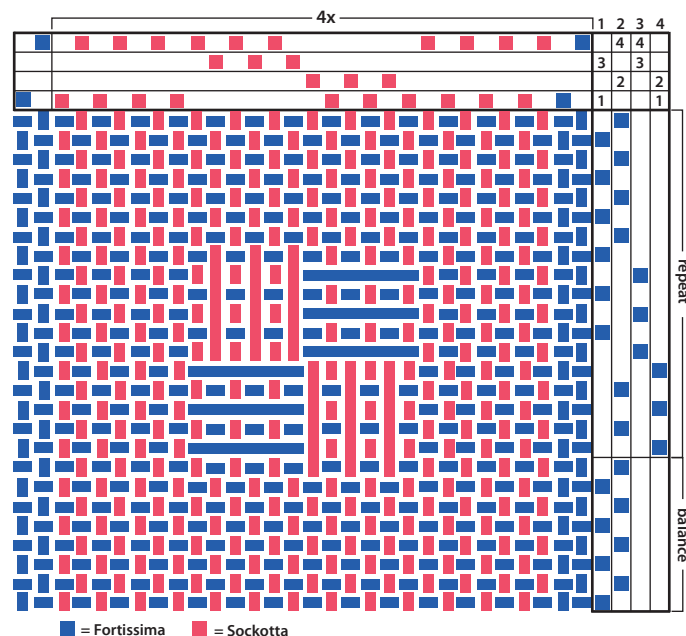
Begin and end the scarf with 2–3 picks of plain weave in scrap yarn. Using blue Fortissima weft, weave following the treadling repeat in the Draft for 68". End with 8 picks plain weave to balance the pattern. These yarns are very elastic—when you release the tension, the yarns will compress. If you do not weave the scarf in one sitting, release the tension on the warp during periods of rest.

Finishing

Remove the scarf from the loom. Trim the fringe at both ends evenly to 6". Prepare a twisted fringe of two groups of 3 ends each (twist the two groups separately clockwise until they start to kink; then twist the two together in the opposite direction and secure with an overhand knot).

Wash the scarf by hand in lukewarm water with a mild liquid soap. Rinse well. Gently squeeze out water. Lay the scarf between two towels and press out as much water as you can. Iron until dry on a wool setting. Trim the tails of the fringe if necessary so that they are all even.

Draft





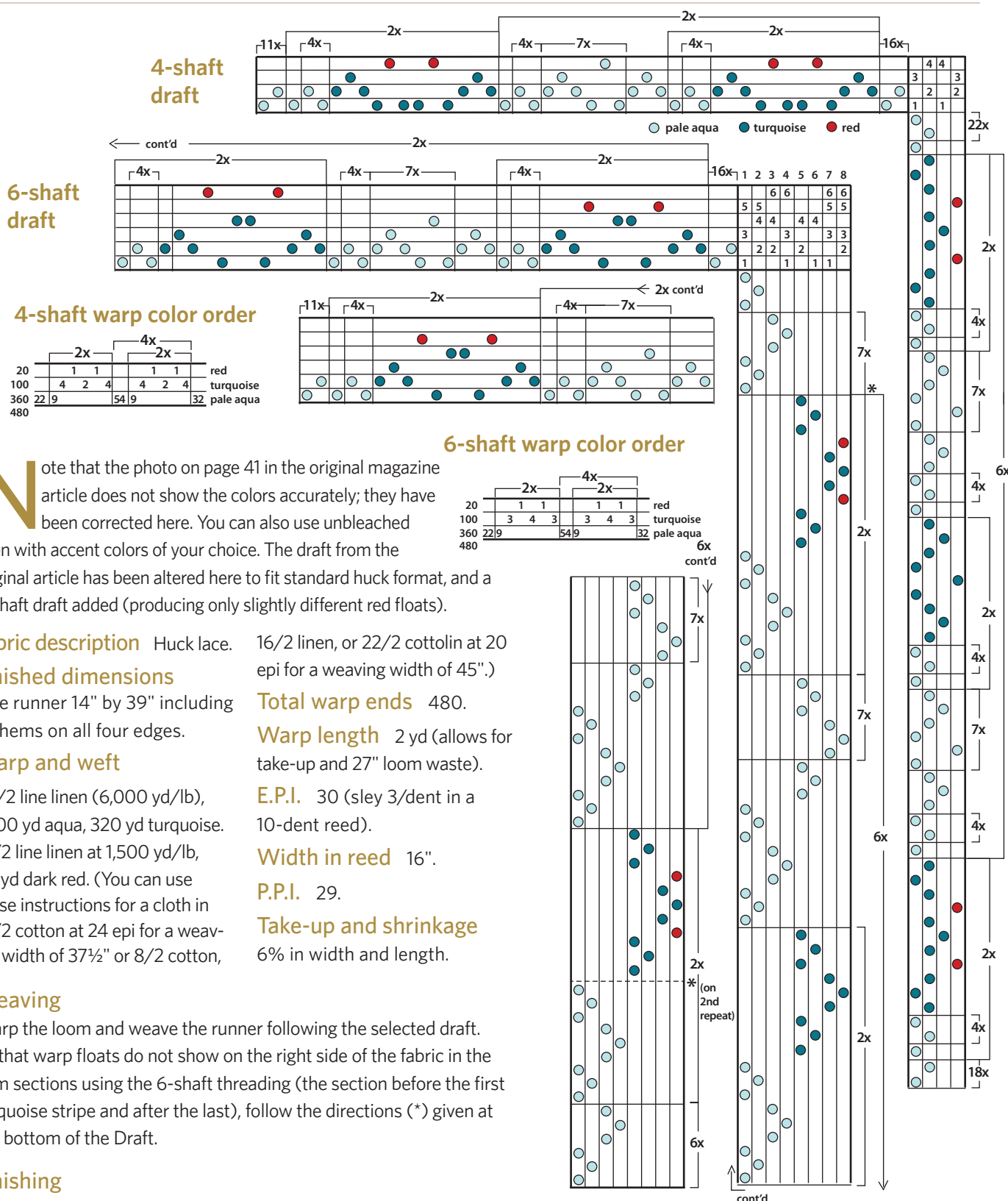
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Plaid huck-lace table runner

by Win Shaw



For hem sections (using the 6-shaft draft) without floats on the face, untie shaft 6 from treadles 3 and 4 for the treddling section up to the first asterisk (*). Retie shaft 6 to continue. On the second of the last 2x repeats, untie shaft 6 from treadles 3 and 4 at the second asterisk.



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Country tablecloth *by Bryn Pinchin*

6-shaft draft

[illegible]

4-shaft draft

both looks like a traditional
 you move closer, you notice
 white squares. With the 6-shaft
 er, you'll see the huck-lace
 ue squares as well. The 4-shaft
 ain weave in the blue squares
 inen, is wonderful to work with
 an especially lovely hand.
 drafts used a different thread-
 ore standard one given here.
 d to be consistent with the other
 .
 k lace.

ne tablecloth 50½" by 53"
 r sides.

From a distance, this cloth looks like a traditional checked pattern. As you move closer, you notice the huck lace in the white squares. With the 6-shaft version, as you get even closer, you'll see the huck-lace interlacement in the dark blue squares as well. The 4-shaft version shows a dark blue plain weave in the blue squares instead. The yarn, 16/2 line linen, is wonderful to work with and finishes beautifully with an especially lovely hand.

In the original article, the drafts used a different threading for huck lace than the more standard one given here. These have been transposed to be consistent with the other huck-lace drafts in this book.

Fabric description Huck lace.

Finished dimensions One tablecloth 50½" by 53" including ⅜" hems on all four sides.

Warp and weft

16/2 line linen (Bockens) at 2,400 yd/lb (available from Lone Star Loom Room, Vävstuga, and Gimakra USA), 2,325 yd half-bleached and 2,020 yd blue (color #136).

Notions

Blue sewing thread.

Total warp ends 981.

Warp length

2½ yd (allows for take-up and 24" loom waste).

E.P.I. 18.

Width in reed 54½".

P.P.I. 18.

Warp color order

	12x		
455	35	35	blue
526	53	35	half-bleached
981			

Weft color order

53			
	35		
35			
	35		
53			

half-bleached
blue

15x

Take-up and shrinkage 8% in width and length.

Weaving

Weave 1" plain weave using half-bleached linen. Follow the lace treadling sequence and the Weft Color Order. End with 1" plain weave using half-bleached. Each lace square should measure 2" under tension.

Finishing

Machine zigzag raw edges. Machine wash on a gentle cycle in hot water with a cold rinse. While the fabric is still damp, press firmly with a hot iron using a pressing cloth to prevent scorching. Turn the edges under $\frac{3}{8}$ " on all four sides and machine sew hems. Press again.



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Country curtains by Connie La Lena

This fabric is designed with a slightly open sett for a light hand. Although lace and spot weaves can create tension problems with a long warp, plain weave between lace sections in this fabric helps even out warp tension differences.

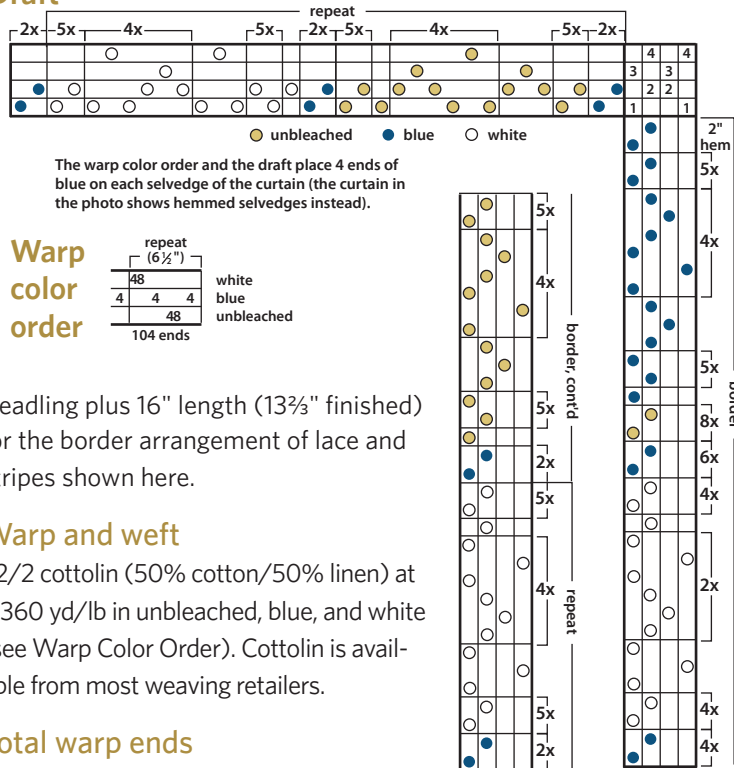
The draft originally used for these curtains is identified in past weaving literature as “canvas weave.” It has been rewritten here using instead the typical threading for what is called three-thread huck (three threads in each half unit). The interlacement, however, is exactly the same with both drafts. (In canvas weave, the threading is 2-1-2, 4-3-4 instead of the 2-3-2, 1-4-1 typical of huck. Transposing the threading from “canvas weave” to huck shows that canvas weave actually is 3-thread huck.

Fabric description 3-thread huck lace (also sometimes called canvas weave) and plain weave.

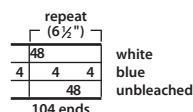
Finished dimensions

For desired curtain dimensions, allow 6½" weaving width (5½" finished) for each repeat in the threading and 7½" length (6⅜" finished) for each repeat in the

Draft



Warp color order



treadling plus 16" length (13⅔" finished) for the border arrangement of lace and stripes shown here.

Warp and weft

22/2 cottolin (50% cotton/50% linen) at 3,360 yd/lb in unbleached, blue, and white (see Warp Color Order). Cottolin is available from most weaving retailers.

Total warp ends

104 ends per repeat (plus 4 ends to balance).

Warp length

Allow 15% take-up and shrinkage for planning warp length and width.

E.P.I. 16.

P.P.I. 14.

Take-up and shrinkage 15% in width and length.

Weaving

Follow the treadling in the Draft. For more than one curtain panel, make a template marking all of the check crossings so the panels will meet exactly. You can use unbleached for alternate rows of lace checks (unbleached is used in the “border” design only for these curtains). Note also that the picks per inch (14) in this fabric are fewer than ends per inch (16). You can make them equal for square “windows” instead of rectangles (each treadling repeat will then be 6½" woven length, 5½" finished; the border 12¾" woven length, about 11⅝" finished).

Finishing

Machine wash in warm water and dry on regular cycle. Iron with a hot iron while still damp.





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Learn with a sampler *by Lynn Tedder*

Huck-lace patterns are formed by floats that contrast with areas of plain weave. When the fabric is washed, the floats allow the threads to slip from their vertical and horizontal alignments to form lacy holes. Linen fibers are especially suitable for huck, producing a sheen in the floats that contrasts with the matte plain weave.

Three textures are possible on a huck threading: plain weave, “spots” of warp or weft floats alternating with plain weave, and alternating warp and weft floats—“lace.” On eight shafts, myriads of different lacy patterns are possible. For huck design theory, see pages 3–6 and Resources (at bottom right). Only five are used in this runner, all designed by Ruth Morrison.

Lace and linen

To weave with linen successfully, the warp must be beamed under even and tight tension. Linen fabrics are ugly ducklings on the loom. As you weave, linen looks wiry, and the huck lace patterning is all but invisible. The beauty of both linen and huck emerge only after the fabric is washed and hard-pressed while still damp until dry.

Fabric description Huck lace.

Finished dimensions

One hemmed runner 12 $\frac{3}{8}$ " by 53".

Warp and weft

30/2 linen at 4,500 yd/lb (Webs), 1,790 yd half-bleached.

Total warp ends 335.

Warp length

3 yd (allows for take-up, 16" sampling, and 26" loom waste).

E.P.I. 25 (3-2 in a 10-dent reed).

Width in reed 13 $\frac{1}{10}$ ". **P.P.I.** 25.

Take-up and shrinkage 8% in width and length.

Weaving

Check to see that you have enough heddles on each shaft, (see the Heddle Count, page 29). Thread the shafts following the draft. Treat the tripled ends as a single end (place all 3 threads in the same heddle and sley them as if they were 1 thread). In a 10-dent reed centering for 13 $\frac{1}{10}$ ", sley the floating selvedge and the first warp thread 1/dent, then sley 2-3/dent across the warp (each tripled end will end up in a dent with one other end). Finish by sleaying the last warp thread and the remaining floating selvedge 1/dent. (This process places the center three threads

of each huck block in the same dent, making it a little easier to see the pattern while you are weaving.)

Add weight to the floating selvedges; a 2" or 3" S-hook works well (floating selvedges aren't necessary with this threading but help form a firm edge).

Tie up the treadles to weave Pattern 1. Note that the treadling is arranged in a “walking order” (alternating from one foot to the other). Treadles 5 and 6 are used for plain weave in all of the tie-ups, but the tie-ups for the pattern treadles must be changed for each different design.

With waste yarn, space the warp by weaving 3 picks of plain weave without beating and then beat them all into place at once. Repeat with 3 more picks. Warp length allows for a sample up to 16" long. Weave 3" plain weave, the border, and then several repeats of the pattern. The weft should turn snugly around the selvedges but be placed in the shed at an angle to minimize draw-in. Keep tension moderate and open the shed only as wide as necessary for the shuttle to pass through. Advance the warp frequently so that the fell of the cloth is always in the mid-range between the breast beam and the beater. If the floating selvedges or other warp threads start to fray, make sure you are allowing enough weft angle in the shed and use beeswax (available in the notions sections of fabric shops) to smooth and strengthen the fraying yarn.

When you are ready to weave the runner, throw 2 picks of plain weave in a fine thread of a contrasting color. Weave each of the patterns following the Draft, changing the tie-up for each pattern. In patterns where not all treadles are used, remove the ties from the extra treadles so that you don't treadle them by mistake.

Finishing

Remove the runner from the loom; cut apart sample; machine zigzag cut edges. Machine wash in hot water with regular detergent along with some clean terry-cloth towels to help remove the reed marks and set the pattern. Tumble dry for 10–15 min. Remove while still damp; iron dry with a hot iron.

Turn raw edges and bring the fold up to the first tripled pick. Press. With needle and matching sewing thread, over-cast the selvedge edges of the hem, and blind-stitch the folded edge. Repeat for second hem.

Resources

van der Hoogt, Madelyn, and Ruth Morrison. “The Way Huck Works.” *The Best of Weaver's: Huck Lace*. Sioux Falls, South Dakota: XRX, Inc., 2000, pp. 10–15.

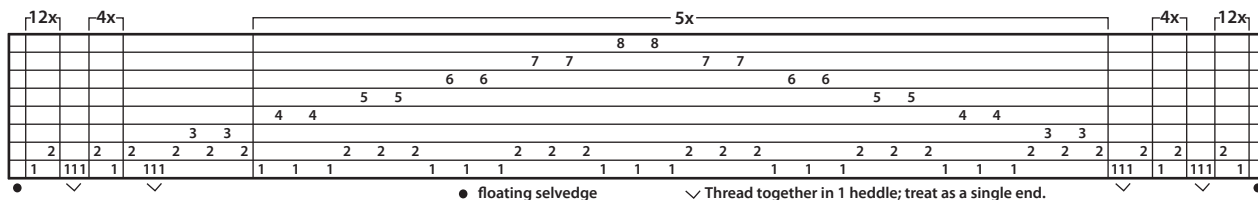


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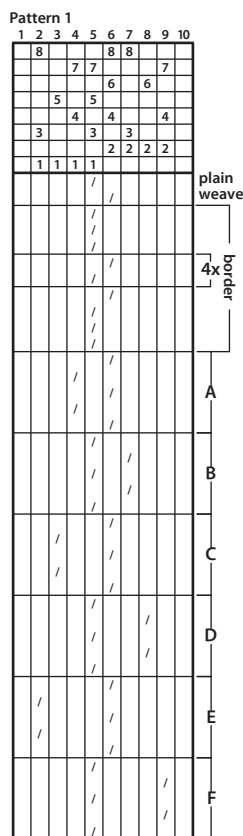
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Draft

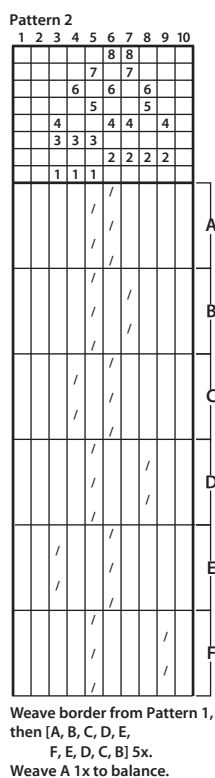


Heddle count

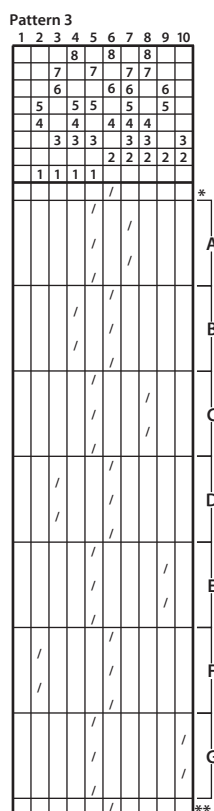
Shaft 8 10
Shaft 7 20
Shaft 6 20
Shaft 5 20
Shaft 4 20
Shaft 3 12
Shaft 2 112
Shaft 1 111
325



Weave 3 1/2" plain weave for hem; weave border 1x, then [A, B, C, D, E, F, E, D, C, B] 5x. Weave A 1x to balance.



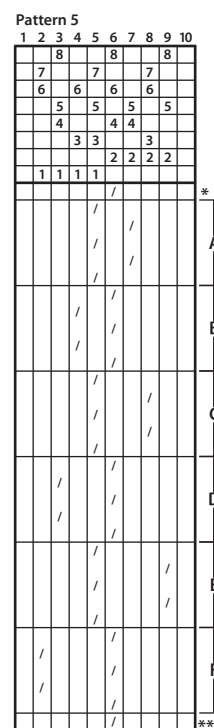
Weave border from Pattern 1, then [A, B, C, D, E, F, E, D, C, B] 5x. Weave A 1x to balance.



Weave border from Pattern 1, then 1 pick of plain weave (*); weave [A, B, C, D, E, F, G, F, E, D, C, B] 4x. Weave A 1x to balance; end with 1 pick plain weave (*).



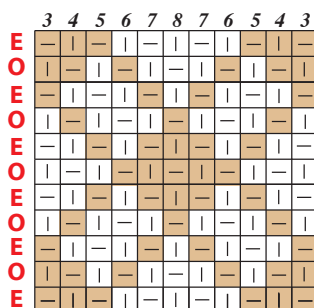
Weave border from Pattern 1, then [A, B, C, D, E, F, G, F, E, D, C, B] 4x. Weave A 1x to balance.



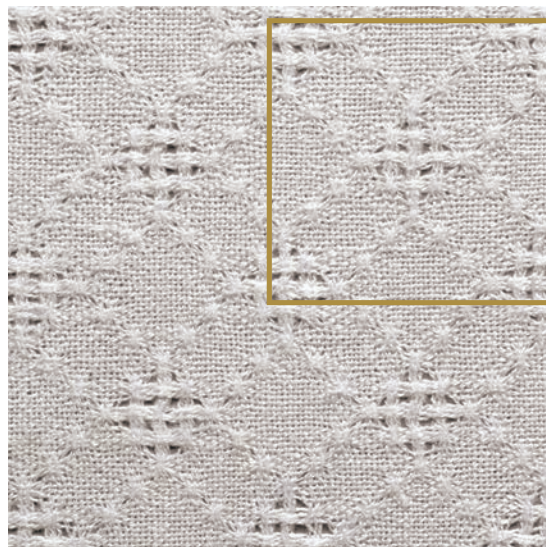
Weave border from Pattern 1, then 1 pick of plain weave (*); weave [A, B, C, D, E, F, E, D, C, B] 5x. Weave A 1x to balance and end with 1 pick of plain weave (*). To end runner, weave border 1x; weave 3 1/2" plain weave for hem.

Designing multishaft huck lace

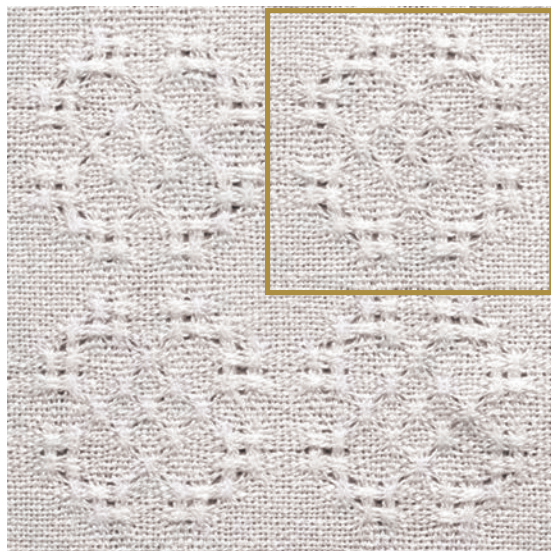
Mark graph paper for each pattern block in the threading (a square under 3 represents 2-3-2-3-2; under 4 = 4-1-4-1-4, etc). Vertical and horizontal marks indicate blocks that can make warp floats vs blocks that can make weft floats. E = a group of picks that begin and end with the even tabby (2-4-6-8); O = a group of picks that begin and end with the odd tabby (1-3-5-7). Pattern is created by tie-up changes to the treadle that would otherwise weave the opposite tabby in each block. Shade squares where you wish a float to appear. Then, add shafts to the "tabby" pattern treadle for warp floats (vertical marks) and subtract shafts from the pattern treadle for weft floats (horizontal marks; think "minus"). Compare the design keys to the resulting tie-ups in the Draft and the final cloth.



Note that the graphed Design Keys and marked areas in the cloth represent one repeat in the Draft (under the 5x bracket) plus the balancing Block A (2-3-2-3-2), represented by the number 3 in the Design Keys.



	3	4	5	6	7	8	7	6	5	4	3	
E	—	—	—	—	—	—	—	—	—	—	—	1 3 5 7
O	—	—	—	—	—	—	—	—	—	—	—	2 4 6 7 8
E	—	—	—	—	—	—	—	—	—	—	—	1 3 5 6 7
O	—	—	—	—	—	—	—	—	—	—	—	2 4 5 6 8
E	—	—	—	—	—	—	—	—	—	—	—	1 3 4 6 7
O	—	—	—	—	—	—	—	—	—	—	—	2 4 6 7 8
E	—	—	—	—	—	—	—	—	—	—	—	1 3 4 6 7
O	—	—	—	—	—	—	—	—	—	—	—	2 4 5 6 8
E	—	—	—	—	—	—	—	—	—	—	—	1 3 5 6 7 8
O	—	—	—	—	—	—	—	—	—	—	—	2 4 6 7 8
E	—	—	—	—	—	—	—	—	—	—	—	1 3 5 7



	3	4	5	6	7	8	7	6	5	4	3	
O	—	—	—	—	—	—	—	—	—	—	—	2 3 4 5 6 7 8
E	—	—	—	—	—	—	—	—	—	—	—	1 3 4 5 7 8
O	—	—	—	—	—	—	—	—	—	—	—	2 3 4 6 7 8
E	—	—	—	—	—	—	—	—	—	—	—	1 3 5 6 7
O	—	—	—	—	—	—	—	—	—	—	—	2 4 5 6 8
E	—	—	—	—	—	—	—	—	—	—	—	1 3 4 5 7
O	—	—	—	—	—	—	—	—	—	—	—	2 3 4 6 7 8
E	—	—	—	—	—	—	—	—	—	—	—	1 3 4 5 7
O	—	—	—	—	—	—	—	—	—	—	—	2 4 5 6 8
E	—	—	—	—	—	—	—	—	—	—	—	1 3 5 6 7 8
O	—	—	—	—	—	—	—	—	—	—	—	2 3 4 6 7 8
E	—	—	—	—	—	—	—	—	—	—	—	1 3 4 5 7 8
O	—	—	—	—	—	—	—	—	—	—	—	2 3 4 5 6 7 8



	3	4	5	6	7	8	7	6	5	4	3	
E	—	—	—	—	—	—	—	—	—	—	—	1 3 5 7 8
O	—	—	—	—	—	—	—	—	—	—	—	2 4 6 8
E	—	—	—	—	—	—	—	—	—	—	—	1 3 5 7 8
O	—	—	—	—	—	—	—	—	—	—	—	2 4 6 7 8
E	—	—	—	—	—	—	—	—	—	—	—	1 3 5 6 7 8
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E	—	—	—	—	—	—	—	—	—	—	—	1 3 5 6 7 8
O	—	—	—	—	—	—	—	—	—	—	—	2 4 5 6 7 8
E	—	—	—	—	—	—	—	—	—	—	—	1 3 5 6 7 8
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E	—	—	—	—	—	—	—	—	—	—	—	1 3 5 7 8
O	—	—	—	—	—	—	—	—	—	—	—	2 4 6 8
E	—	—	—	—	—	—	—	—	—	—	—	1 3 5 7 8



	3	4	5	6	7	8	7	6	5	4	3	
O	—	—	—	—	—	—	—	—	—	—	—	2 4 5 6 8
E	—	—	—	—	—	—	—	—	—	—	—	1 3 5 6 7 8
O	—	—	—	—	—	—	—	—	—	—	—	2 3 4 6 7 8
E	—	—	—	—	—	—	—	—	—	—	—	1 3 4 5 7 8
O	—	—	—	—	—	—	—	—	—	—	—	2 4 5 6 8
E	—	—	—	—	—	—	—	—	—	—	—	1 3 5 6 7
O	—	—	—	—	—	—	—	—	—	—	—	2 4 5 6 8
E	—	—	—	—	—	—	—	—	—	—	—	1 3 4 5 7 8
O	—	—	—	—	—	—	—	—	—	—	—	2 3 4 6 7 8
E	—	—	—	—	—	—	—	—	—	—	—	1 3 5 6 7 8
O	—	—	—	—	—	—	—	—	—	—	—	2 4 5 6 8



Huck-lace tea cloth by Laurie Autio

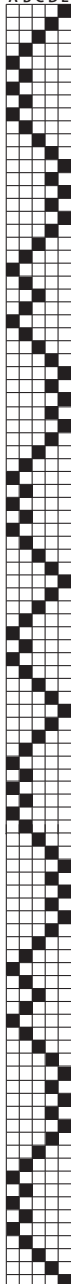
The five-block pattern in this huck-lace tea cloth forms circles, ovals, and floral shapes in lace that are surrounded by a plain-weave/float huck texture. A different but very effective variation on this threading can also be produced by using the Profile Threading as the Profile Treadingling.

Fabric description Huck lace.

Finished dimensions

One cloth 22½" by 27" including 2" hems.

A B C D E



Profile treadingling

Warping and weaving

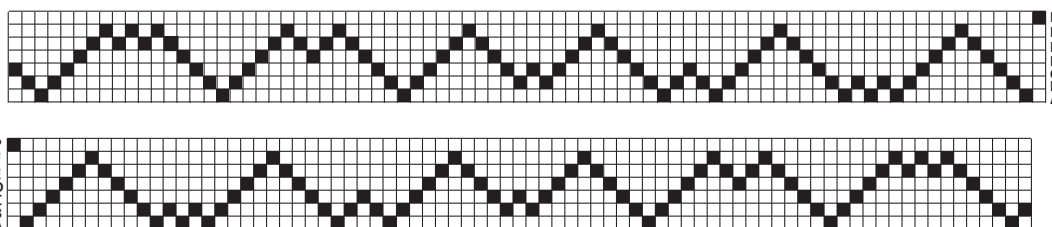
Thread the shafts substituting one threading unit of huck lace (see the Threading and Treadingling Units) for each square on the Profile Threading draft (one square on the Block A row equals 2-3-2-3-2, one square on the B row 1-4-1-4-1, etc.). Note that the first and last squares in the Profile Threading are on the P row, which is not a pattern block but indicates 52 ends alternating shafts 1 and 2 for plain-weave selvages.

Being and end with 3½" of plain weave. Then weave the cloth substituting the 5 picks for A, B, C, D, or E from the Threading and Treadingling Units for each square in the Profile Treadingling draft. (For a cloth with a different design, use the Profile Threading as the Profile Treadingling.)

Yarn amounts and warp length given here produce only one small cloth. For more, add 1 yd for each additional cloth.

40/2 linen is a very fine yarn. You can weave the same design in 10/2 cotton at 24 ends per inch for a weaving width of 37¾" or 8/2 cotton, 16/2 linen, or 22/2 cottolin at 20 ends per inch for a weaving width of 44¾".

Profile threading



Warp and weft

40/2 line linen at 6,000 yd/lb, 2,420 yd bleached (available from Webs).

Notions White sewing thread for hems.

Total warp ends 897.

Warp length

1¾ yd (allows for take-up and 27" loom waste).

E.P.I. 36. **Width in reed** 25". **P.P.I.** 34.

Take-up and shrinkage 11% in width and length.

Threading and treadingling units

Threading and treadling units										P				
E		D		C		B		A		[28x]				
7	7									7	7	7		
		6	6							6		6		
				5	5						5	5		5
						4	4			4			4	
								3	3		3		3	3
2	2	2		2	2	2		2	2	2	2	2	2	2
		1	1	1			1	1	1		1	1	1	1
										plain weave				
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Bamboo huck-lace shawl

Draft

[illegible]

My discovery of bamboo yarn, with its exquisite drape and glorious range of (forty one!) colors, began an exploration of lace weaves in color instead of the usual white or off-white yarns. Using several colors in the warp and one in the weft allows exciting color interactions, yet the weaving goes quickly with one shuttle.

Fabric description Huck lace.

Finished dimensions One shawl 21" × 80" plus 5½" twisted fringe at each end.

Warp and weft

Warp: 2-ply 100% bamboo at 6,300 yd/lb
(Bambu 12), 1,140 yd Cerise (red-violet), 760 yd
Acorn (light orange), 715 yd Ginger (dark gold),
65 yd Snow Pea (pale green).

Weft: 2-ply 100% bamboo (6,300 yd/lb),
2,075 yd Indigo (bright blue).

Total warp ends 764.

Warp length

3½ yd (allows for take-up and 27" loom waste plus 8" sampling; loom waste includes fringe).

E.P.I. 30. Width in reed 25½". P.P.I. 28.

Take-up and shrinkage

17% in width, 10% in length.

Weaving

Weave a sample following the treadling in the Draft for about 8" to practice an even beat and smooth selvages. Experiment to determine the angle of weft that does not cause draw-in. This draft allows for many different designs. The one I chose distributes plain weave evenly throughout the treadling (otherwise your beat must vary—gentle in sections with more lace, firm in sections with more plain weave).

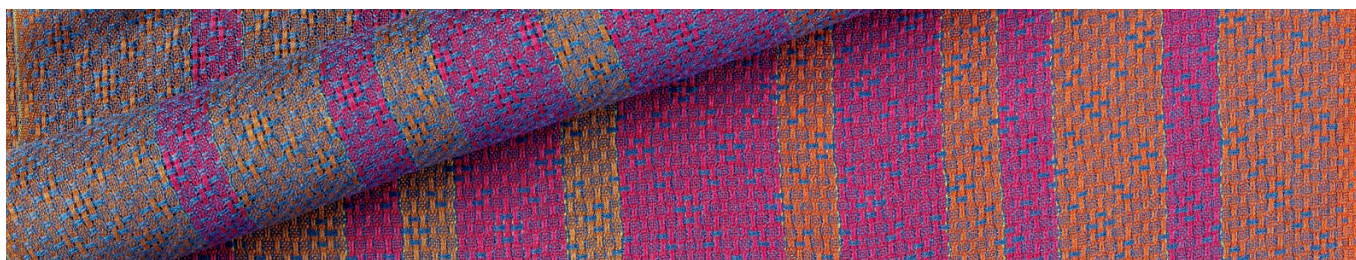
Allowing 8" for fringe, weave 3 picks plain weave and hemstitch, including 6 ends and 3 picks in each stitch. Weave 3 more picks plain weave and then weave the shawl following the Draft for 87". End with 6 picks plain weave and hemstitch as at the beginning over the last 3 picks.

Finishing

Remove the shawl from the loom and prepare a twisted fringe: Separately twist two groups of 6 ends each (the same groups included in the hemstitching) clockwise in the same direction until they kink. Then twist them together in the opposite direction and secure with an overhand knot.

Machine wash, mild soap, gentle cycle; stop the machine frequently to let soak. Rinse and spin out the water. Machine dry, low heat with a dry towel, until about half dry. Hang to finish drying. To fluff, tumble a bit more in a warm dryer. Press with a steam iron.

Warp color order

[illegible]



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Yarns for weaving huck lace *by Pattie Graver*

Inspired by the Weaving Today Huck Lace Study Group and with the generous help of Lynn Tedder, I decided to experiment using different fibers with the same threading for huck lace (six blocks in a point, producing a lace heart). The yarns in the samples shown here are 10/2 pearl cotton, 10/2 bamboo, 20/2 silk, 18/2 wool/silk (laceweight), 10/2 linen, and 8/2 cotton/linen (very similar to 22/2 cottolin).



10/2 pearl cotton sample before wet-finishing

10/2 pearl cotton

Yd/lb 4,200
Ends 193 **Sett** 24 epi
Width on loom 8½" **Width off loom** 7¼"
Width after wet-finishing 6¾"
Draw-in and shrinkage 16%
Woven length 7"
Length after wet-finishing 6⅜"
Take-up and shrinkage 9%
Appropriate uses Items requiring a stable cloth without a lot of drape, such as dish towels, pillowcases, table runners



10/2 pearl cotton sample after wet-finishing



2/18 wool/silk sample before wet-finishing

18/2 wool/silk (50/50)

Yd/lb 5,040
Ends 193 **Sett** 24 epi
Width on loom 8½" **Width off loom** 7⅝"
Width after wet-finishing 7⅜"
Draw-in and shrinkage: 8½%
Woven length 7⅝"
Length after wet-finishing 7½"
Take-up and shrinkage 1⅓%
Appropriate uses Items requiring a light but warm cloth, such as scarves, shawls, baby blankets



2/18 wool/silk sample after wet-finishing



20/2 silk sample before wet-finishing

20/2 silk

Yd/lb 4,900
Ends 193 **Sett** 24 epi
Width on loom 8½" **Width off loom** 7¼"
Width after wet-finishing 6⅝"
Draw-in and shrinkage 18%
Woven length 7⅝"
Length after wet-finishing 6⅝"
Take-up and shrinkage 7%
Appropriate uses Items requiring a sturdy, smooth cloth, such as garments, pillowcases



20/2 silk sample after wet-finishing



10/2 bamboo sample before wet-finishing

10/2 bamboo

Yd/lb 4,200
Ends 193 **Sett** 24 epi
Width on loom 8½" **Width off loom** 7¼"
Width after wet-finishing 6½"
Draw-in and shrinkage 19%
Woven length 7½"
Length after wet-finishing 7"
Take-up and shrinkage 6½%
Appropriate uses Items requiring cloth with drape and sheen, such as shawls, curtains



10/2 bamboo sample after wet-finishing



10/2 linen sample before wet-finishing

10/2 linen

Yd/lb 1,500
Ends 69 **Sett** 15 epi
Width on loom 4¾" **Width off loom** 4¼"
Width after wet-finishing 3¾"
Draw-in and shrinkage 20%
Woven length 4¾"
Length after wet-finishing 3½"
Take-up and shrinkage 20%
Appropriate uses Items requiring a rustic cloth, such as table mats and runners, lined bags



10/2 linen sample after wet-finishing



8/2 cotton/linen sample before wet-finishing

8/2 cotton/linen (50/50)

Yd/lb 3,360
Ends 193 **Sett** 20 epi
Width on loom 9⅞"
Width off loom 8⅝"
Width after wet-finishing 8"
Draw-in and shrinkage 17½%
Woven length 8⅝"
Length after wet-finishing 8¼"
Take-up and shrinkage 1½%
Appropriate uses Table mats, runners, towels



8/2 cotton/linen sample after wet-finishing

THE LESSONS I LEARNED

- Huck is plain weave with skips in the interlacement that create floats.
- In a 5-thread block of huck, the second and fourth threads determine the difference between skips and plain weave. Therefore, if Block A is threaded 2-3-2-3-2, the threads on shaft 3 create skips and are considered the pattern threads; in Block B (1-4-1-4-1), the threads on shaft 4 are the pattern threads.
- In each treadling block, the first, third, and fifth picks weave plain weave (even shafts are raised in one 5-pick set, odd shafts in the alternate set); the second and fourth picks create the skips and are considered the pattern picks. For the pattern picks: Subtract a pattern shaft from the plain-weave treadle to create a weft float; add a pattern shaft to create a warp float. Warp and weft floats alternate in adjacent blocks in both warp and weft directions.
- There is no wrong or right side to the cloth: warp floats appear on the back of the cloth wherever weft floats are on the face and vice versa.
- The more blocks that weave lace in a 5-pick treadling sequence, the lighter the beat must be to square the design. Areas of plain weave (threaded on shafts 1 and 2) between areas of motifs and/or along the selvages help control the beat.

Download the
 draft for the heart at
weavingtoday.com
 (under Free Stuff,
 Projects)

TIPS FOR PLANNING, HEMSTITCHING, AND FRINGING

TAKE-UP AND SHRINKAGE

Weft take-up and shrinkage.

As you weave, extra weft length (beyond the width of the warp in the reed) must be placed in the shed to allow for weft take-up (in *Handwoven* projects, this amount is included in required weft yardage). The fabric then draws in as the weft bends over and under the warp thread so that the width of the woven cloth is narrower than the width of the warp in the reed. The cloth narrows further after it is removed from the loom, and shrinkage will narrow it even more if it is washed. To calculate the percentage of weft take-up and shrinkage, divide the finished width by the width of the warp in the reed.

Warp take-up and shrinkage.

As you weave, the warp bends over and under the weft threads so that fabric length is less than the length of the warp threads that produce it (*Handwoven* projects give the number of inches allowed for this take-up under Warp Length). When you release tension and remove the fabric from the loom, the fabric takes up in the warp direction. If you wash the fabric, shrinkage further decreases its length. To calculate the percentage of warp take-up and shrinkage, divide the finished fabric length by the woven length (measured under tension on the loom) plus the inches given for warp take-up.

To calculate how long to weave a fabric for a specific finished length, use the percentage derived by dividing the finished length listed in the project by the woven length measured under tension on the loom (for this percentage, do not include the inches allowed for take-up in the warp yarn).

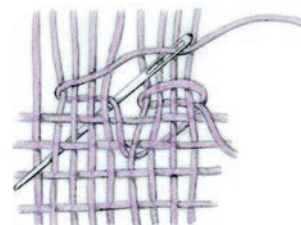
TWISTING (OR PLYING) THE FRINGE

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 counter-clockwise (or twist them together 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.)



SIMPLE HEMSTITCHING

Weave several picks of plain weave, 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 group. Pass the needle under the same group of ends, bringing it out through the weaving two (or more) weft threads below the fell. Repeat for each group of ends across the fell. Needleweave the tail into the selvedge and trim. (See * below.)

DOUBLE (ITALIAN) HEMSTITCHING

Weave several picks plain weave, ending with the shuttle on the right side if right-handed, left side if left-handed. Measure a length of weft four 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 warp ends 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. Then begin again, encircling the next group of ends. (See * below.)

**For both methods: To hemstitch the first end of a piece, weave a header, weave four or five picks of plain weave (or of the basic weave structure used in the piece), and hemstitch over the top two or three weft rows. Weave the piece and then hemstitch the other end over the last two or three weft rows. Remove the fabric from the loom and discard the header and weft threads below the first hemstitching.*

