Mixed Warp Stash Scarf

Working With Stash Yarns

THE Handweaving Academy

Stash Recipe

Combine four different yarns. Mix together evenly across the warp. Bake in a plain weave or twill ~~pan~~ draft for 70-80”. Let cool, twist fringe. Wet finish and you’re done!

Presto: a beautiful scarf made from your stash!

Project Overview

This isn't a recipe for a specific scarf, it's a set of instructions for a *type* of scarf that you can adjust to any length, any width, and the yarns you happen to have in your stash.

The key element of this project is blending several yarns together evenly across the width of the warp with at most two or three ends of the same yarn side by side.

This distributes their individual properties evenly and everywhere, as opposed to concentrating them in any one area as a wider stripe of a single yarn would do.

The resulting fabric may be lumpy and bumpy, but it will also be mostly uniform and look cohesive. Best of all, evenly mixing the yarns will make the project easier to manage on the loom.

Designing Your Scarf

For your own version of a Mixed Warp Stash Scarf, you'll need to do three things:

1. Choose your yarns
2. Decide on a yarn order and threading
3. Figure out a sett

Step 1: Choosing yarns

Choose four yarns for your warp and a fifth for your weft. If you're not sure there's enough of a certain yarn, skip ahead to Deciding on Dimensions on page 8 and read about measuring your yarn and adjusting dimensions.

To keep things low risk and low effort, use yarns of similar weight, fiber content, and texture that you're sure will play nicely together.

If you're okay with a little risk and more effort, add some variety when it comes to weight, fiber content, and texture. The more your yarns differ, the "spicier" your project will be.

Shaft loom weavers: Make sure the warp yarns you choose will pass easily through your heddle eyes and the dents in your reed.

Rigid heddle weavers: Make sure the warp yarns you choose will pass easily through the eyes and slots of your heddle.

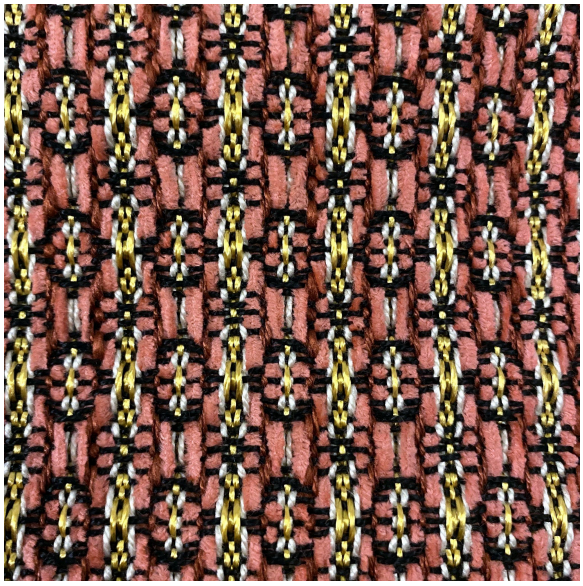
Regardless of how much spice you're comfortable with, be sure to test any mystery yarns for warp worthiness before including them in your warp.

> Refer to the course *Working With Stash Yarns* for detailed information about choosing and identifying yarns and testing your choices for warp worthiness.

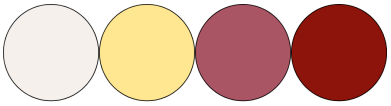
Choosing colors

The degree to which the twill diamonds or diagonals of your fabric show up depends on contrast between warp and weft. The key factor is not the colors themselves but their *value*, or the lightness or darkness of the colors.

If your warp yarns are of very different values, the twill won't show up very well and **the dominant design element of your fabric will be the colors and textures of the warp yarns.**



In the fabric to the left, the warp yarns have a wide range of values:



The twill is what creates the motifs, but the fabric doesn't "read" as twill. Instead, the focus is on what individual yarns are doing.

The twill will be hard to see if there isn't much contrast between warp and weft, too. The blue and pink scarf on page 1 has warp yarns that are mostly the same value, but the weft is about the same value, too. Again, the colors and textures of the yarn are more eye-catching than the structure of the twill.

If your warp colors are of similar values and your weft is a *different* value, however, **the diamonds and diagonals of the twill will become more visible.** That's what's happening in the scarf on page 2. The warp yarns in that scarf are all light values and the weft is dark, so the twill diamonds are the most eye-catching element of the design.

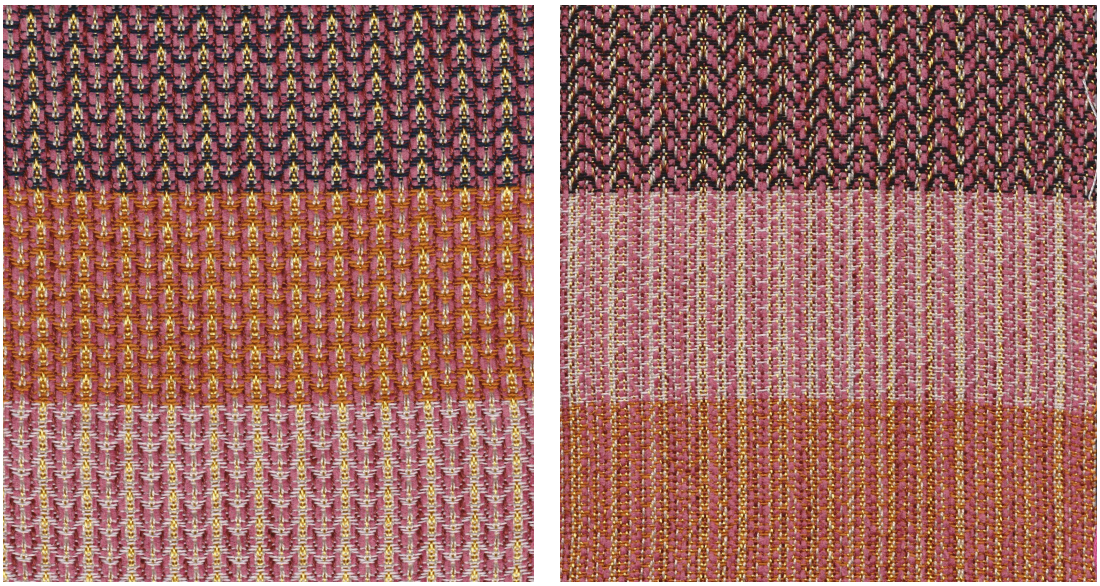
If you really want the twill diagonals and diamonds to show up well, choose light colors for warp yarns and dark colors for weft, or vice versa (dark warp and light weft)..

If you don't care about seeing the diagonals and diamonds, choose any colors you like! In this case, you might as well keep your treadling simple - straight draw or a simple point - since the twill isn't going to be a focal point.

Step 2: Choosing threading and color order

When you wind several yarns together to make a warp chain, you've got two choices for how to thread them: randomly, in whatever order they present themselves, or in a regular order that creates a pattern.

Threading the warp yarns in a specific order creates regular patterns that draw the eye. Threading the warp yarns randomly avoids patterns and creates irregularly spaced accent stripes instead.



A regular, repeated order creates visible patterns that draw the eye.
A random yarn order creates irregular accent stripes.

As with choice of colors and contrast, neither option is correct or better - it all depends on the effect you're going for.

Random yarn order

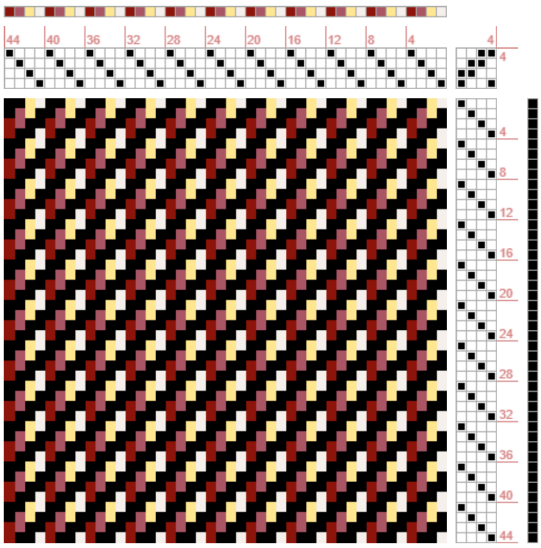
A random threading order requires very little effort and works with any threading. Simply use each set of warp ends wound together in the order they seem to want to go.

Sometimes the same yarn will end one group and begin the next, which is what causes the irregular accent stripes.

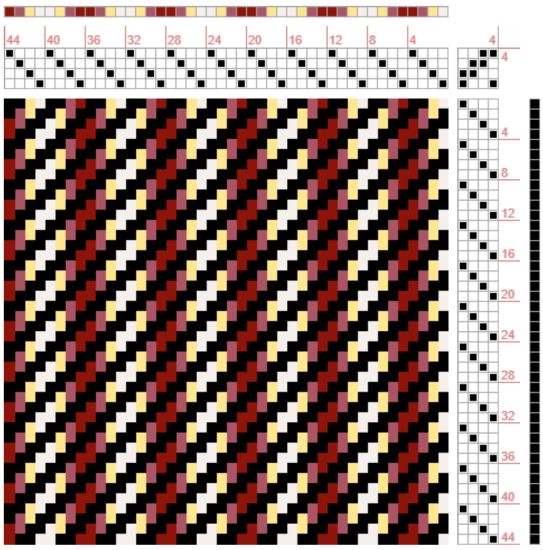
Regular yarn order

Decide on a specific order to thread each group of four yarns. One obvious choice is arranging them from lightest to darkest or darkest to lightest, but experiment with other orders and see what you like best.

Reversing the order of the yarns from one group to the next will create wider stripes. For example, if your color order goes A B C D in the first set of four threads, use the next group in D C B A order.



Ex 1: An ABCD ABCD color order makes narrow stripes



Ex 2: An ABCD DCBA color order makes wider stripes

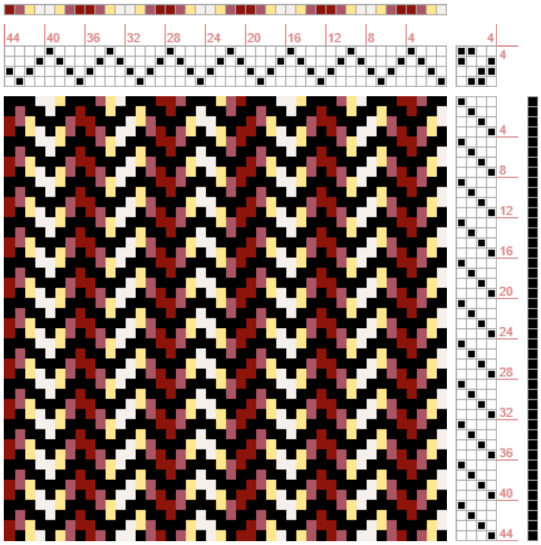
Choosing a threading

You can always thread straight draw (1-2-3-4) as in the two drafts above and then weave your scarf in twill or plain weave. That isn't your only choice, though!

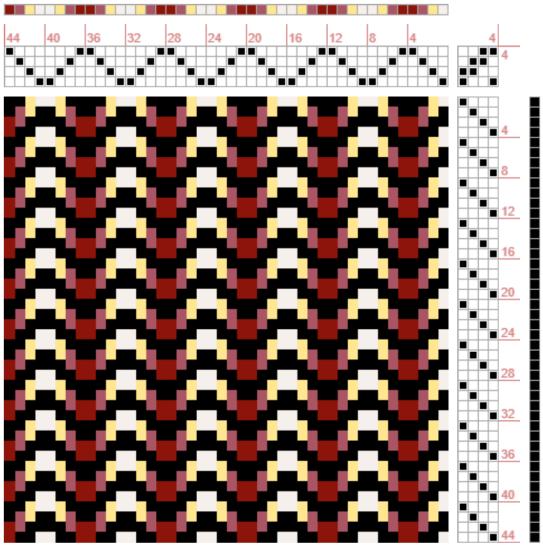
If you're threading the yarns (colors) in a random order, you can use any threading you like, including a regular point draw. If you're making a repeating pattern out of your four ends, it's a good idea to choose a threading that has four ends or a multiple of four ends per repeat so that it's easy to marry the color order with the threading.

For example, a point threading on four shafts has only *six* ends per repeat, which means it gets out of sync with the color order. Putting two ends on each shaft at the points expands

the threading repeat to eight ends, so the colors match up better:

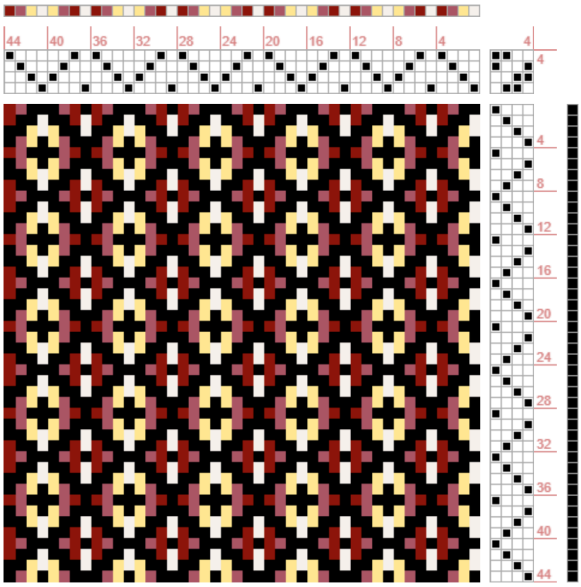


ABCD ABCD on 4S point draw gets out of sync

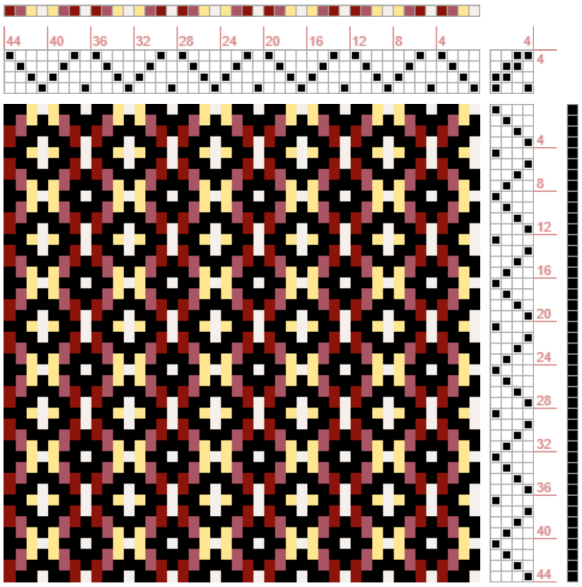


Ex 3: The same order with doubled points

Rosepath has eight ends per repeat and works very well for mixed warps with four warp ends per group, with a slight change to the color order. The same color always comes first in each group of four, and the other three colors reverse from one group to the next. In other words, the color order is A BCD A DCB.



Ex 4: Rosepath with ABCD ADCB front of cloth



Ex 4: Rosepath with ABCD ADCB back of cloth

One yarn/color per shaft

Some threading and yarn order combinations have the special property that all the ends of a particular yarn are threaded on the same shaft, and each shaft only has one kind of yarn on it.

In the drafts on the previous pages, Examples 1, 3 and 4 have this property but Example 2 does not.

Choosing a draft with this property makes it easier to manage yarns that stretch differently from one another, because you can isolate the saggy yarns by lifting the single shaft that they're threaded on. See Weaving Your Scarf on page 10 for more details.

All of the suggested drafts in this recipe have this property with the exception of the four shaft straight draw with ABCD DCBA color order.

Step 3: Choose a Sett

To choose a sett for a mixture of yarns, simply average the suggested sett for each yarn.

For example, the pink/gold/white fabric on pages 4 and 5 has four warp yarns with suggested setts of 18, 19, 26, and 28. The average of those four numbers is 22.75, or 23 rounded up. I used a sett of 24 EPI for that fabric and was very happy with the result.

If your yarns are all similar in size and construction, they'll all have close to the same suggested sett – and the average of their setts will be also be about the same number. In that case, you can simply use the recommended sett for a yarn in the middle of the pack, diameter wise and skip the math.

> You can use our *Ashenhurst Sett Calculator* to determine suggested setts for your chosen yarns.

Deciding on Dimensions

> Use our *Mixed Warp Project Planner and Record Sheet* to work out and keep track of all these numbers.

Warp length

Three yards is a good length for a scarf warp. If you have enough yarn and want to audition several weft colors before starting your scarf, add another 18". If you're running short on yarn and are okay with a shorter scarf, you can squeeze a scarf out of a warp 2.5 yards long.

Desired warp width and number of ends

Start by choosing a target width-in-reed, keeping in mind that your scarf will be a little narrower once it's done. You can expect a narrow scarf warp to lose around an inch from the reed to the finished cloth. For wider warps, plan on losing a little more.

Multiply your desired width-in-reed by the sett you chose earlier. That's how many warp ends you need to get your desired width but **watch out: you might need to add or subtract a few so that your threading and/or color repeat fits into your total warp ends.**

For instance, the four shaft rosepath threading (Example 4 on page 7), the threading repeat is eight ends. (Technically, you also need one more end to finish off the final repeat but in a mixed warp scarf leaving off that last end is unlikely to show.) It needs a multiple of eight ends, not four, to have full threading repeats at both selvages.

In the straight draw on four shafts with the reversing color order (Example 2 on page 6), the *threading* repeat is only four ends but the *color* order is eight ends. It also needs a multiple of eight ends for complete color repeats at both selvages.

Round the number of ends you need for your desired width-in-reed up or down to a multiple of your threading repeat AND color repeat to get the actual number of ends you need.

> Our *Mixed Warp Project Planner and Record Sheet* will work this number out for you!

Warp yarn required

If you have lots of yarn, you don't need to calculate this. If you're worried about running out, it's a good idea to do the following math.

Divide your actual number of warp ends by four: that's how many ends you need of each one of your warp yarns. Multiply that number by the length of your warp to determine how many *yards* you need of each yarn.

Compare that to the amount of yarn you have to make sure you've got enough. If you run out while winding, that means your scarf will be narrower – how much narrower depends on how soon you run out!

> If you're not sure how many yards you have of each of your yarns, refer to the lesson *Measuring Mystery Yarns*.

Winding the warp

Winding all four yarns together is the magic that makes this project work so well.

> Refer to *Winding Multiple Ends at a Time* in the *Weaver's Toolbox* for detailed instructions, including videos, for winding multiple ends on either a warping board or a warping mill.

Winding multiple ends and keeping them together in the cross works especially well if you dress your loom from back to front (B2F). It works for front to back (F2B) warping as well if your yarns are well behaved and you take care to keep the yarns from crossing.

If you warp F2B and tend to have trouble with tangles, another option is to wind each yarn in its own chain and merge them together in the reed while you sley, making sure to sley them in your desired color order.

Weaving Your Scarf

Weaving a mixed warp scarf is no different from weaving any other scarf unless your warp yarns stretch at different rates. If that happens, some of the warp threads may eventually get tighter or looser than the rest of the warp.

The good news is that the tighter and looser threads will be mixed evenly and everywhere across the warp rather than concentrated in stripes, which means the tighter threads will support the shuttle. As long as the shuttle slides through the shed without any problems, you don't need to worry too much about differences in tension.

If the shuttle starts to snag threads drooping down from the top of the shed, though, you'll need to take the slack out of those threads.

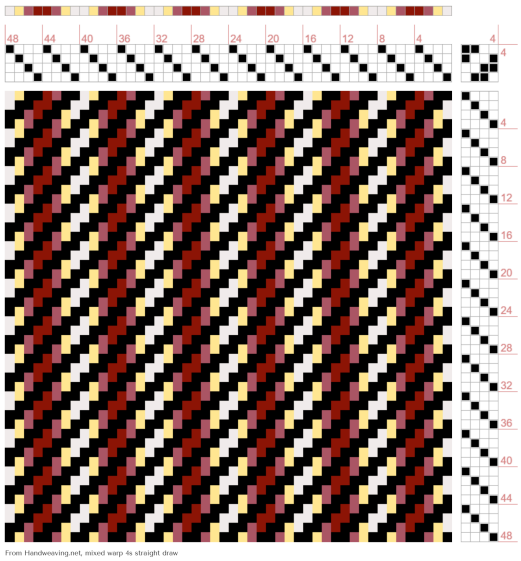
Dealing with drooping warp threads

To fix threads that are drooping, insert a dowel under the loose threads behind the shafts and then slide it through the warp down to the warp beam. The thicker the dowel, the more slack it will take out of the loose threads. You may need to switch to a thicker dowel or add a second dowel part way along your warp.

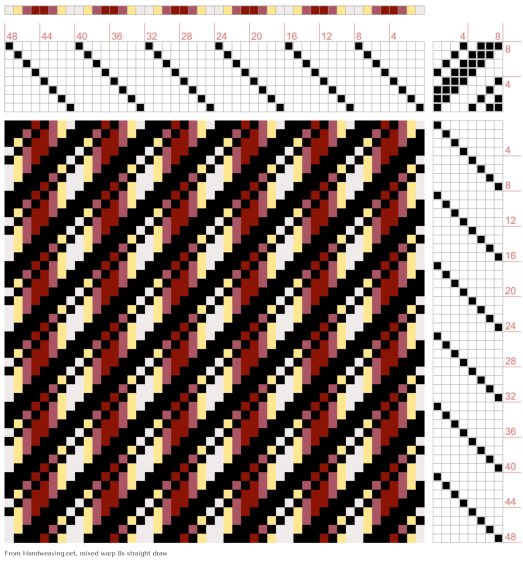
If the loose threads are all on the same shaft there's a shortcut to lifting up the individual threads: you can simply lift up the shaft they're all on to create a shed behind the castle and insert the dowel. **Except for the four shaft straight draw, all of the suggested drafts below have this property.**

Suggested Drafts for Four and Eight Shafts

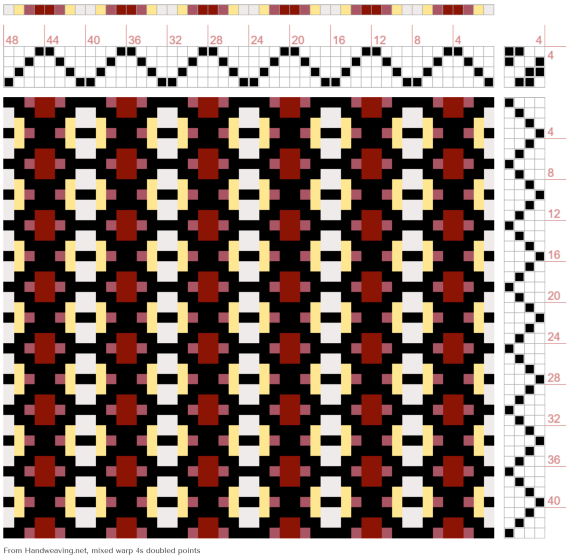
Straight draw, doubled points, and rosepath all make great choices for mixed warps wound four ends at a time, since their threading repeats are 4, 8, or 16 ends - **all multiples of four.**



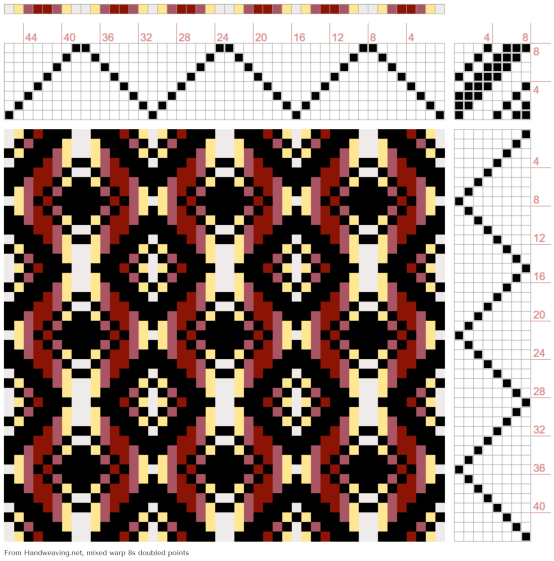
4S Straight Draw ABCD DCBA



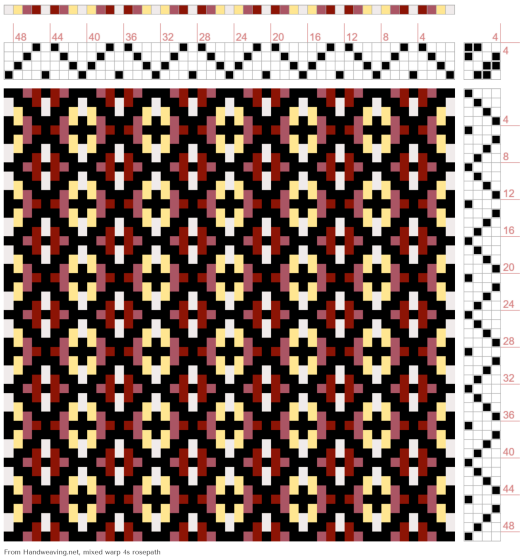
8S Straight Draw ABCD DCBA



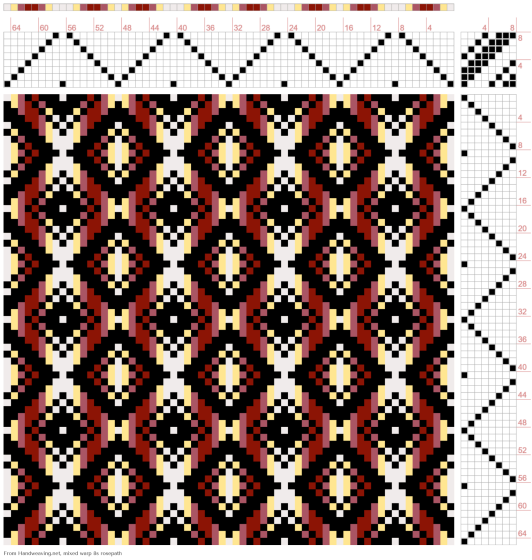
4S Doubled Points ABCD DCBA



8S Doubled Points ABCD DCBA



4S Rosepath ABCD ADCB

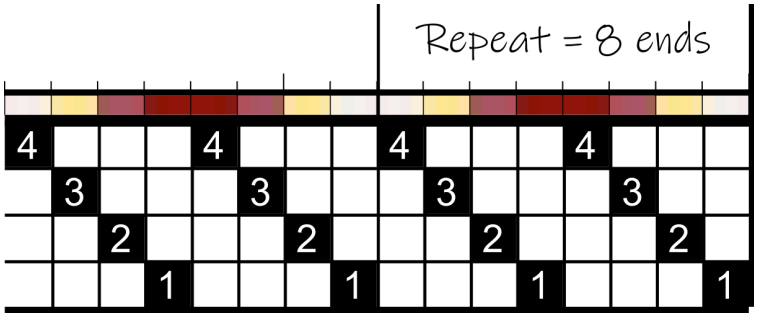


8S Rosepath ABCD DCBA AABCD DCB

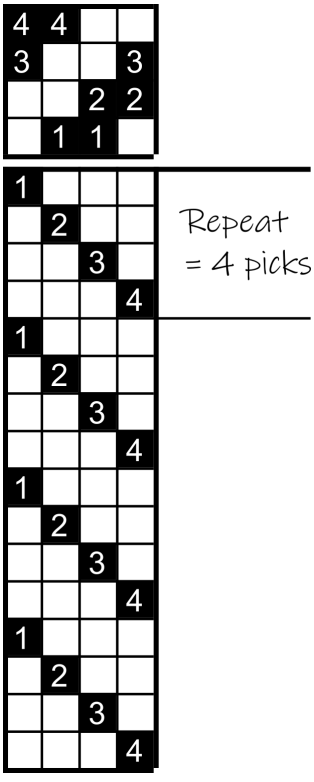
4S Straight draw with *any* color order

This draft is shown with an ABCD DCBA color order (8 ends/repeat), but would work well with any color order, including random. Just make sure to use a multiple of ends that suits your color order.

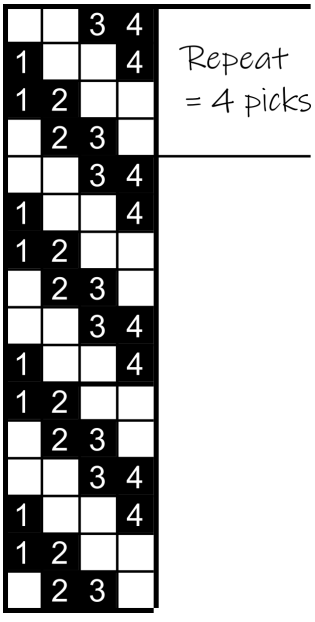
Threading with ABCD DCBA color order



Straight Treadling + Rising Tie-up

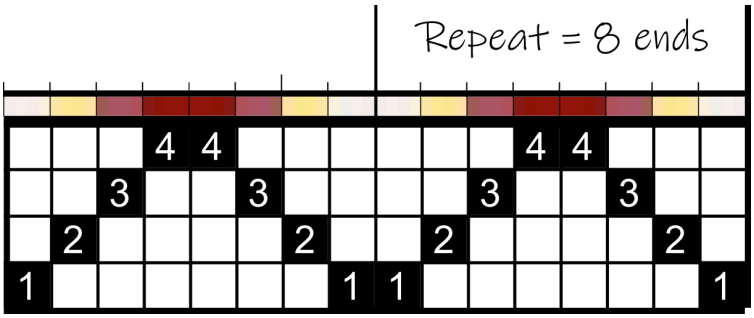


Straight Liftplan

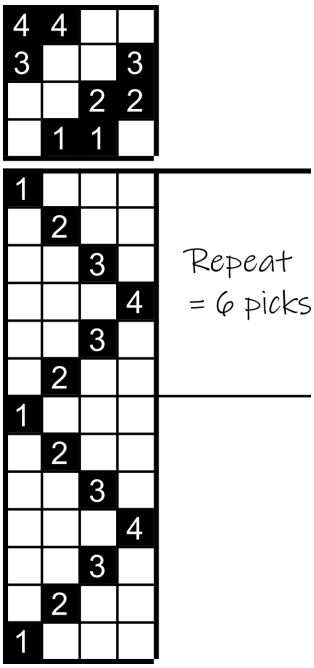


4S Doubled Point Draw with ABCD DCBA color order

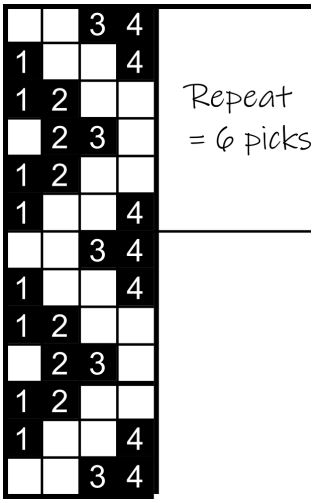
Threading with ABCD DCBA color order



Point Treadling + Rising Tie-up

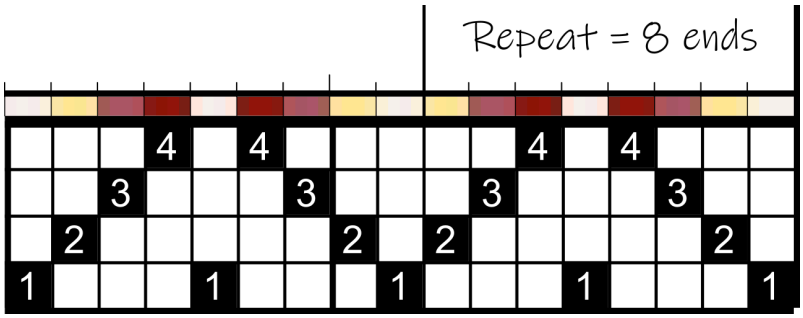


Point Liftplan

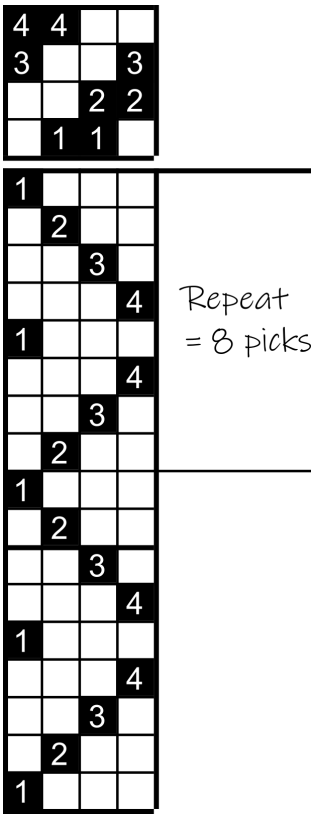


4S Rosepath with ABCD ADCB color order

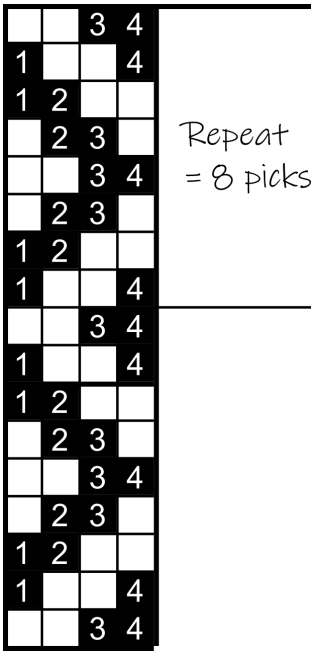
Threading with ABCD ADCB color order



Rosepath Treadling + Rising Tie-up



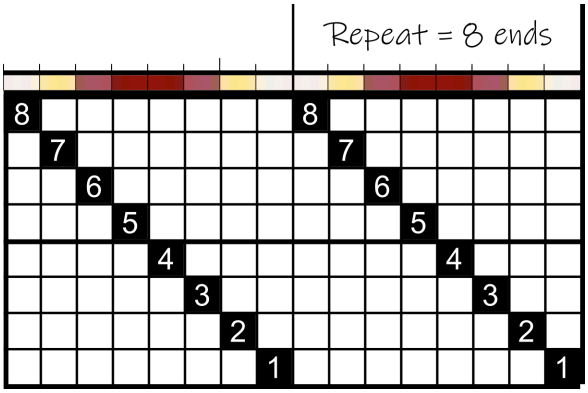
Rosepath Liftplan



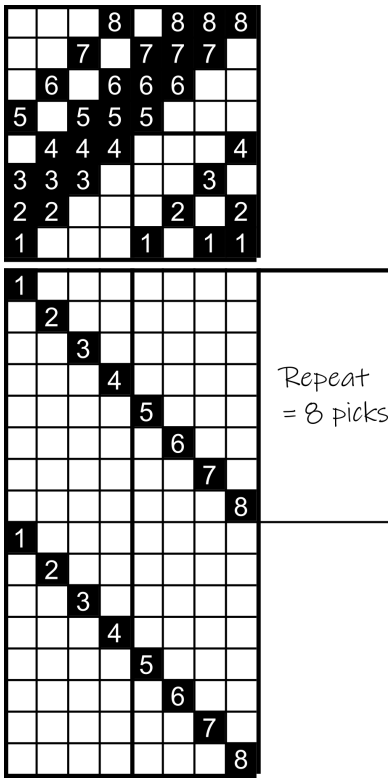
8S Straight draw with any color order

This draft is shown with an ABCD DCBA color order and 3/1/1/3 tie-up, but works well with any color order, including random, and any 8S tie-up. Just make sure to use a multiple of ends that suits your color order.

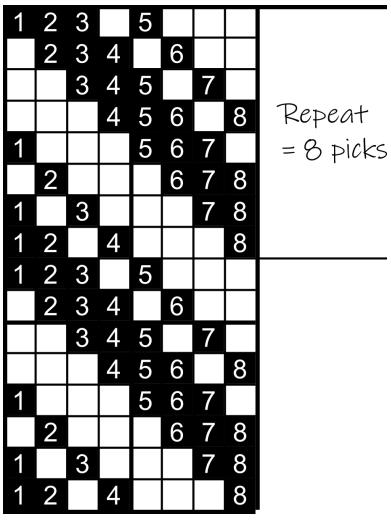
Threading with ABCD DCBA color order



Straight Treadling + Rising Tie-up

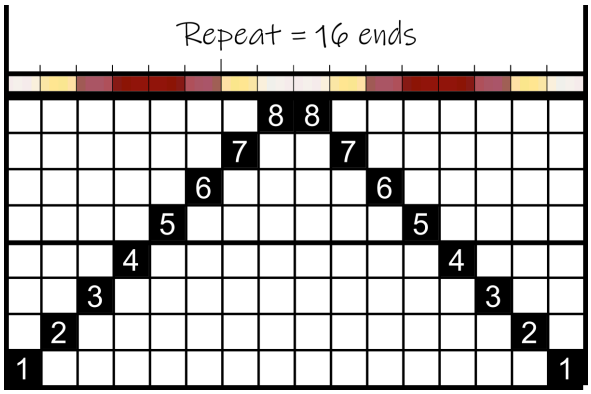


Straight Liftplan

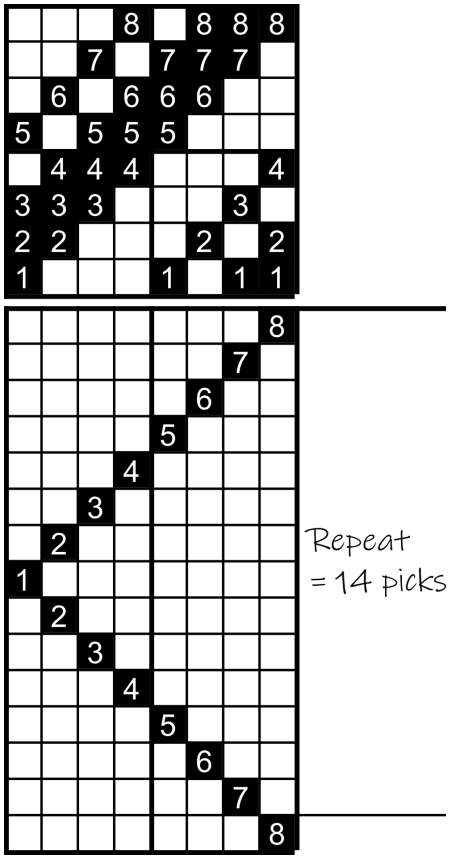


8S Doubled Point Draw with ABCD DCBA color order

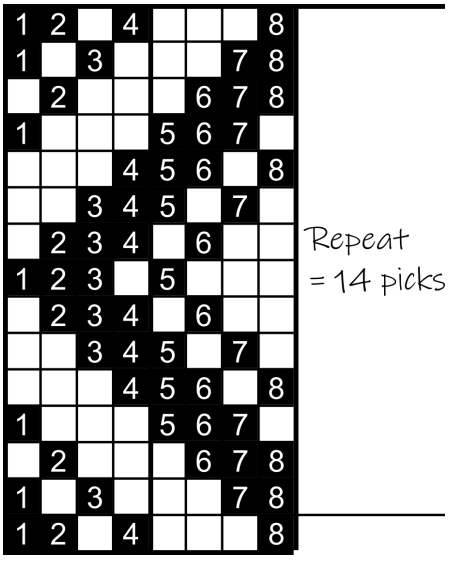
Threading with ABCD DCBA color order



Point Treadling + Rising Tie-up



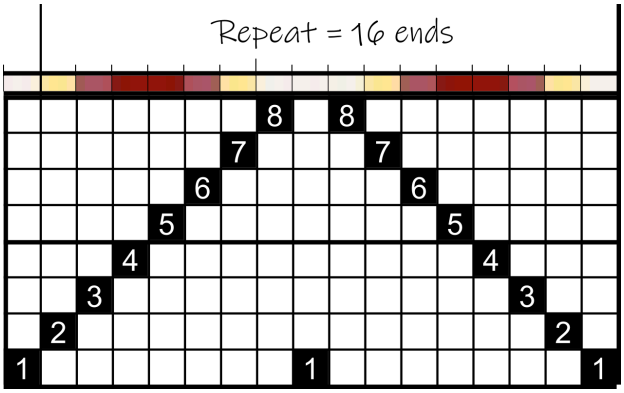
Point Liftplan



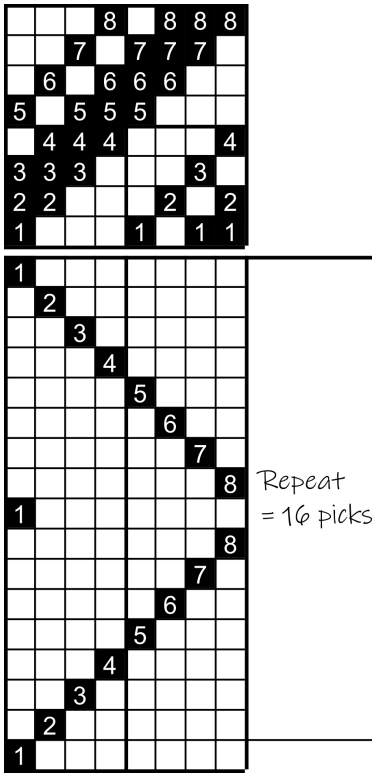
8S Rosepath with ABCD ADCB color order

The color order for this threading is ABCDDCBA A**A**BCDDCB. NB: This color order requires "stealing the A" from the fourth group of threads and threading into the third group.

Threading with ABCDDCBA AABCDDCB color order



Rosepath Treadling + Rising Tie-up



Rosepath Liftplan

The Drafts in YOUR Colors

Click the links below to download the .wif files for use in the Draft Editor or other weaving software.

- Four shaft straight draw with ABCD DCBA color order
- Four shaft doubled points with ABCD DCBA color order
- Four shaft rosepath with ABCD ADCB color order
- Eight shaft straight draw with ABCD DCBA color order
- Eight shaft doubled points with ABCD DCBA color order
- Eight shaft rosepath with ABCD DCBA AABCD DCB color order

> Better yet, you can open these drafts in the Draft Editor on the Academy website and replace our colors with your own! That will let you test your color combination and placement, and save the results in **your own colors**.

- See one of the 4S Drafts in YOUR Colors
- See one of the 8S Drafts in YOUR Colors