

In this video I'm going to talk about yarn choice and sett for double huck.

Choosing Yarn and Sett

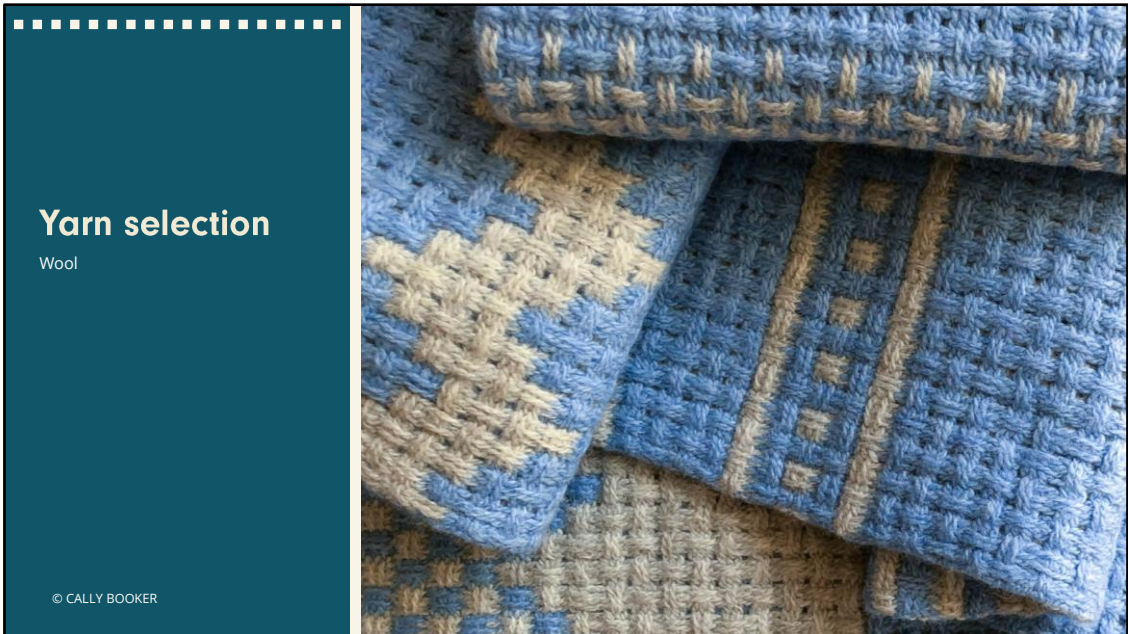
In this lesson

- 1 What's a good yarn?
- 2 Sett and results
- 3 Organising the warp
- 4 Planning your sett

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We'll start with a brief discussion of yarn types and their characteristics in relation to double huck, and this will lead us to consider what kind of results we get with different yarns and different setts. I'll outline the principles we need to adopt in order to organise our warp successfully, and then give you a step-by-step process for establishing a suitable sett for your yarn.

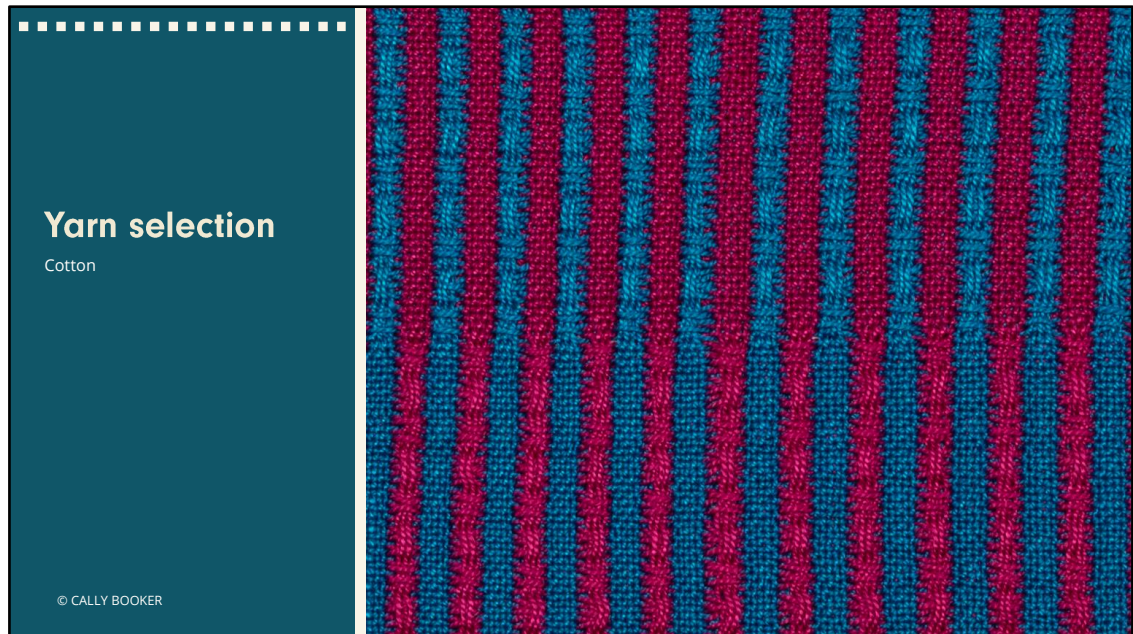
Choosing Yarn and Sett



For this first excursion into double huck, I am recommending that you choose a yarn which isn't too slippery. Although a double layer warp can be a bit sticky if the yarn is not smooth, we need to prioritise the finished cloth over the weaving process. A slightly grabby yarn will handle the long floats of double huck better than one which is smooth and slippery.

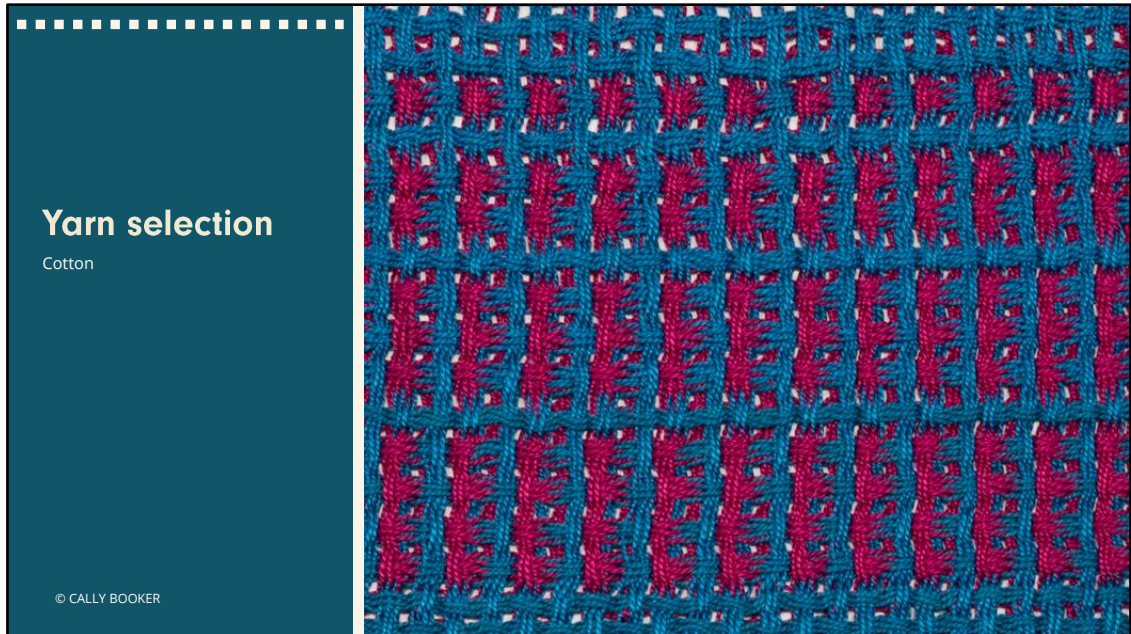
My favourite yarns for this structure are mainly wool-based and often blends of wool and silk. A blended yarn is a good way to get the benefit of both the sheen of the silk and the grabby nature of the wool. However, it is an expensive choice for a sampler. A pure wool yarn will give excellent results. This sampler was woven in a 2/14 Nm merino with a sett of 30 epi for quite a bouncy fabric, suitable for a blanket.

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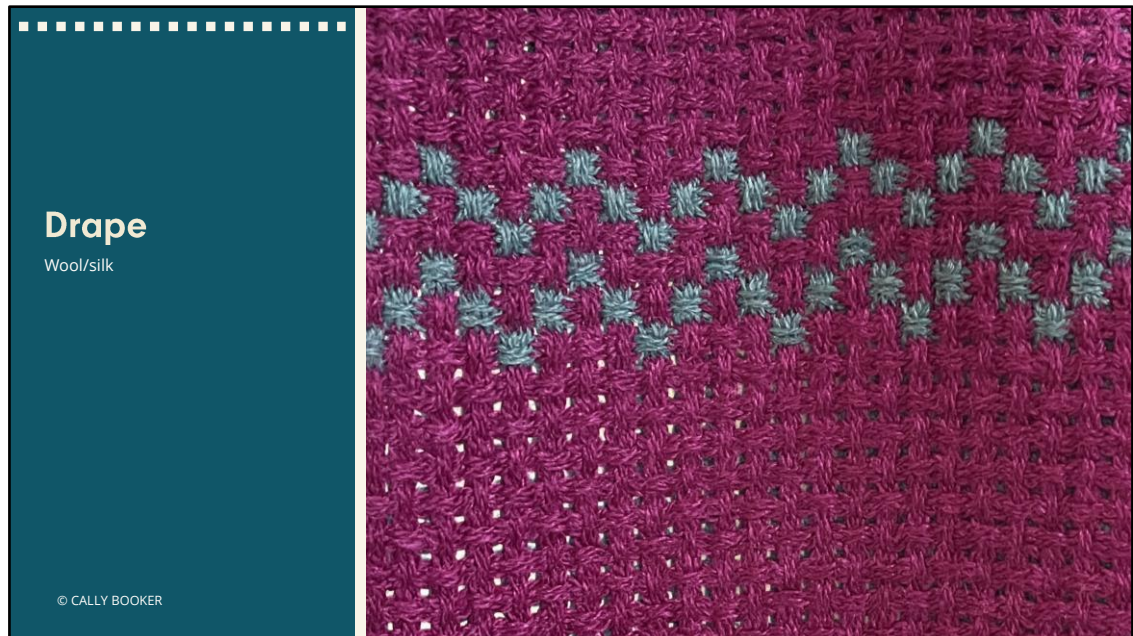
Another good option is cotton or a blend with cotton such as cottolin. An unmercerised cotton shares some of the grabby qualities of wool and won't slip around too much. A mercerised cotton will produce a cloth with a lovely hand, but is a bit more challenging to handle. This sampler was woven with a 10/2 mercerised cotton set at 40 epi, which is an excellent choice for mixing huck with plain weave, as in the piece shown here. The fabric is a very pleasing weight and drapes well.

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However, the layers can slip about a little when just huck is used for making patterns, as shown here. I have found that unmercerised cotton is less likely to do this.

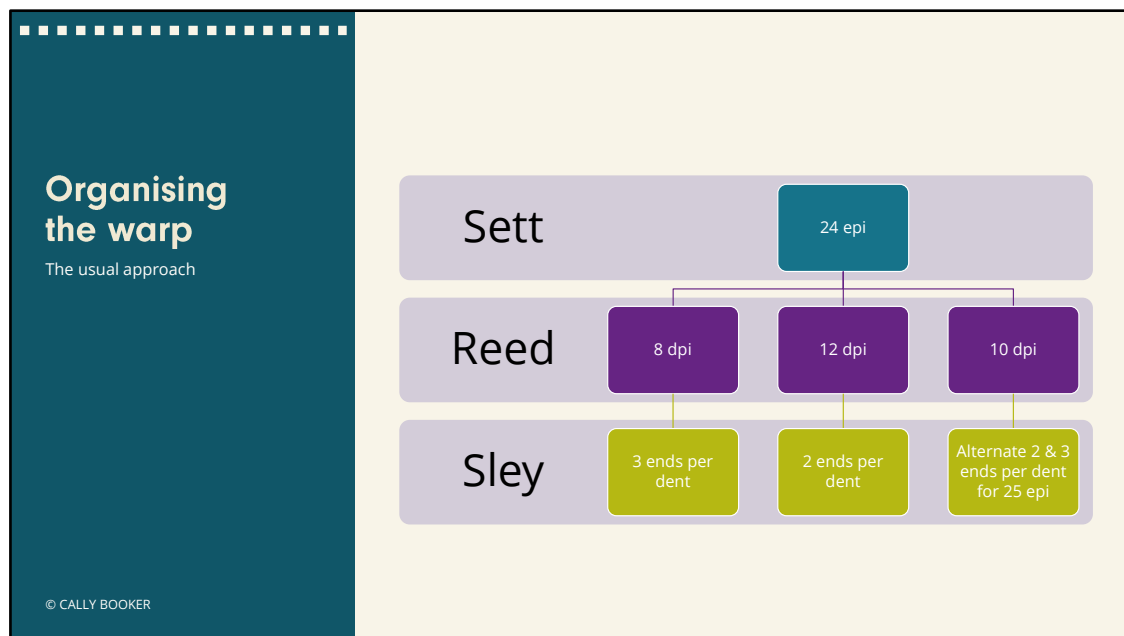
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There is a trade-off here between the stability of the fabric and its drape. This sample has been woven in 2/18 Juggerspun Zephyr. Its drape is enhanced by the open lacy structure of the double huck, which has holes all the way through.

“Holes all the way through” is achieved with a more open sett per layer than you might use for a single layer of huck, and the Zephyr supports this well because the yarn doesn’t slide about. However, there is another important consideration. If you are using a wool or a wool blend yarn then something that is at least as important as the actual density of the sett is the way it is organised in the reed.

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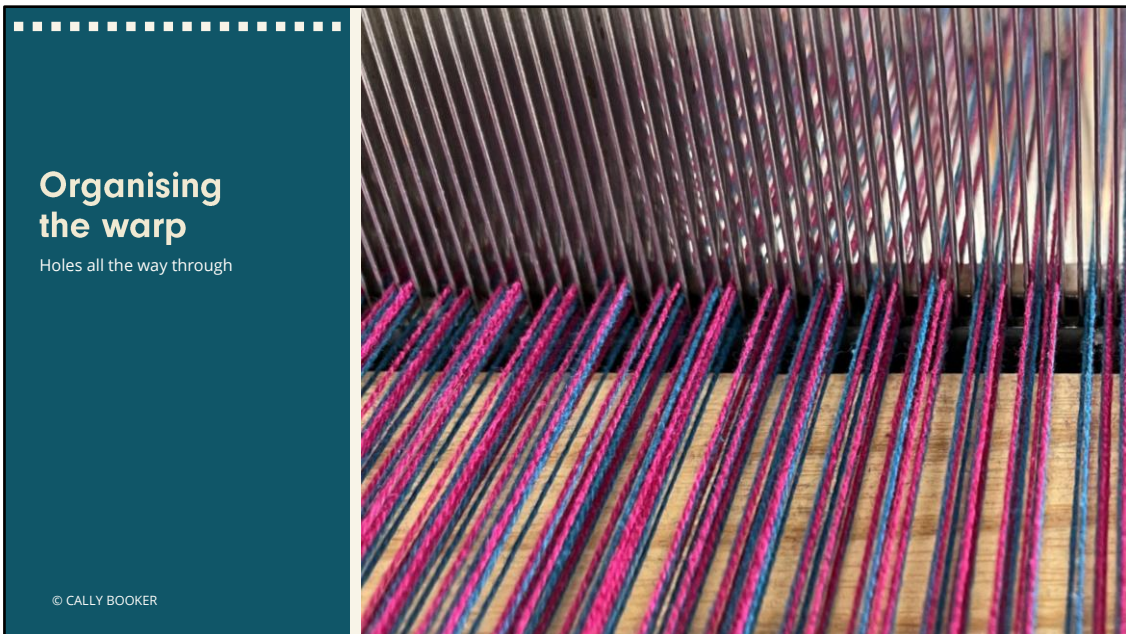


The organisation of the warp is typically driven by the sett we are trying to obtain. For instance, I know that if I want to have 24 epi then I can sley it as 2 ends per dent in a 12 dent reed or as 3 per dent in an 8 dent reed, and either of those options will give me an equally good result. I may start thinking more deeply about sleying patterns if I want to obtain 24 epi and I only have a 10 dent reed - and the prospect of that complexity may well lead me to think that actually a sett of 25 epi would do just as well!

Essentially our organisation is serving the sett by trying to keep the warp as close as possible to an average density all the way across.

However, to encourage a dense double layer warp to fall neatly into units of lace, we need to come at this question from the other direction. We don't want an average sett all the way across. We want a sleying pattern which will be denser where the woven half-units are constructed and more open in between them.

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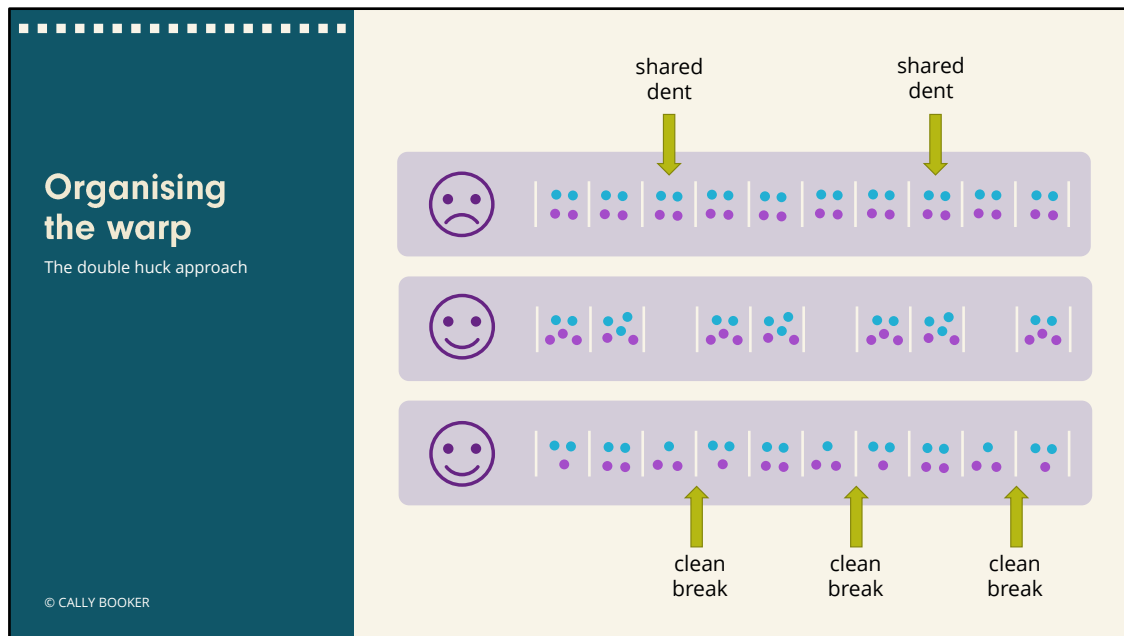


When we weave lace it is true that we usually see the holes open up considerably when we take the cloth off the loom and wet finish it. This applies to double huck too, but if the yarn is a grabby one, the process of lacification (yes, I made that word up) is less marked when we have the two layers to deal with. Having made lots of double huck experiments in wool with different setts and sleying patterns, I have always found that a more focused sett gives more reliable results than an average sett.

Ideally those open spaces would be achieved by leaving an empty dent between half-units. However, the feasibility of this does depend on the grist of the yarn and on the size of the reed. For instance, a very fine reed makes it easier to leave an empty dent in principle. However, if your yarn is quite chunky relative to the dents then you may have difficulty squeezing all the ends you need into the dents allocated to the half-unit. If you cannot leave an empty dent, however, all is not lost. The most important thing to achieve is to avoid sharing a dent between two half-units.

A more slippery yarn, such as a smooth mercerised cotton, will fall into lace more easily, and in this case a sett that minimises float length may be more desirable. We'll come back to this shortly.

Choosing Yarn and Sett



Let's make this more concrete with an example. My sample using Zephyr was sleyed in a 10 dpi reed. My starting point was to look at the lace sett for a single layer of Zephyr. Several sources all recommend a lace sett of 20 epi, so my starting point for thinking about two layers of lace will be to consider twice that number - 40 epi - as my maximum sett. For most weaves, it would be easy to sley 40 epi in a 10 dpi reed by putting 4 ends in every dent. However, my individual lace half-unit consists of 10 ends: 5 ends from each layer. If I put 4 ends in every dent then I will use two and half dents for those 10 ends, and then the next half-unit will begin in the same dent. I'll have a clean break between half-units two and three, but half-units three and four will share a dent again.

There are two better options open to me. One is to sley all ten ends for the half-unit into two dents, so five ends in each dent, and then leave the third dent empty. The other would be to spread my ten ends over those three dents, giving a bit more weight to the central dent. I could sley 3 in dent 1, 4 in dent 2 and 3 in dent 3.

Both of these options assign three dents to ten ends, or 30 dents to 100 ends, making an average sett of 33 and a third ends per inch. This is quite a bit more open than 40 epi, but it certainly works well in practice. I am very happy with the drape of the double huck fabric woven at this sett, and the Zephyr yarn holds together well so the slightly longer floats (over three dents rather than two and a half) are not a problem.

Choosing Yarn and Sett

Varying the reed

Reed	Sleying Pattern		
	5 5 0	3 4 3	5 5
10 dpi	33.3 epi	33.3 epi	50 epi
12 dpi	40 epi	40 epi	60 epi

Half-units don't share their space

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If I want a denser cloth, however, then what options might I consider? If I put my ten ends into two dents and don't leave a gap between half-units, I will have an overall sett of 50 epi which is too much for the Zephyr. I wouldn't do that for plain double weave with this yarn, never mind double huck. But if I had a twelve dpi reed I could close up the sett without changing the sleying pattern. Either of my previous two options - 5-5-0 and 3-4-3 - could be used over three dents at 12 dpi to give me an overall sett of 40 epi. I would be inclined to choose the second option here, as five ends of 18/2 Zephyr in one-twelfth of an inch might be uncomfortably crowded. In fact, I chose that option at 10 dpi as well.

This probably sounds quite complicated, but in many ways it is actually rather simple. **Those ten ends in a half-unit go together, and they don't share their space with anyone else.** If that consideration takes precedence over any nice distinctions between 32, 34, 36 epi then the range of available setts from any particular reed is very constrained. We have already noted that reducing the number of dents per half-unit from three to two takes the sett in a ten dpi reed from approximately 33 epi to 50 epi. If instead we increase the space allowed to four dents, then we can have 25 epi, to five dents, 20 epi. That kind of sett would be appropriate to a chunky yarn such as a wool suitable for a blanket.

Choosing Yarn and Sett

Establishing a sett for making holes

1 Find a suitable sett for a single layer of lace	3 Choose a reed and sketch out an inch or two of dents
2 Double it to establish a maximum sett	4 Allocate your 10-end groups to the dents - no sharing!

I have provided a table of sett and slewing options in the worksheet that accompanies this video, but before you turn to that have a go at thinking through the logic of your own yarn and reed combination.

Start with your yarn. If you have woven lace with it before, what sett did you use? If you haven't woven lace with it, can you estimate based on your experience of other structures? Check your estimate against the recommendations of your yarn supplier or a reference source, such as the Handwoven Magazine Master Yarn Chart. Whatever that number is, double it, and note that down as your maximum sett: you don't want to exceed that number.

Now look at your reed or reeds. If you have a choice, great, but pick a standard one such as a 10 or 12 dent reed to start with. I find it really helps to sketch out an inch's worth of dents, or even two or three inches, and think about how I might place the yarn in them. Now you are going to allocate your yarn, always keeping each group of ten ends together and separate from the next group. If you are working with a finer reed or a thicker yarn, you may be able to assign just two ends per dent - one from each layer - but in most cases you will need to assign them in threes or more.

You'll discover quite quickly that your options are fairly limited: a group of ten will probably need to inhabit two, three or four dents, and there won't be a whole range of options without changing reed size.

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I've focused on choosing a sett that will emphasise the holes in the lace, but that is not the only option. Even where the holes are less distinct, the fabric still has a very pleasing hand, and in this case you can plan your sett in the usual way.

For a grabby yarn, I would still aim for something a little more open than twice the single layer sett. In my Zephyr example, that means staying *below* the 40 epi I identified as the maximum sett. In a 12-dent reed a sett of 36 epi would be a reasonable choice; in a 10-dent then a sett of 35 epi (putting 3 ends and 4 ends into alternate dents) would be slightly easier.

In general, the more slippery the yarn, the more densely I would tend to set it. It will form lace more easily in any case, and the main consideration has to be managing the float length so the fabric is not too sleazy. Using the maximum sett, i.e. twice the single-layer sett, would be a reasonable option here.

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Experiment and record

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Since we are weaving a sampler, you might well want to try different sleying patterns across the width of your warp. You can maintain the same overall sett, but do more to encourage holes in one area compared with another. Then you will be able to see whether it makes a practical difference for your yarn. Whatever you do, don't forget to write it down so that you can refer back when you review your samples.