



# MEIOIEVAL TEXTILES

## Weaving Fabric for a 14<sup>th</sup> Century Dress

By Jan Ward

I have always wanted to weave the fabric for a Medieval dress, but until recently have never been sufficiently motivated to actually tackle the project. My goal is to weave and construct a dress modeled on one from Greenland, using information on similarly dated textiles from London. I am relying mostly on the book, *Textiles and Clothing*, by Elizabeth Crowfoot, Frances Pritchard, and Kay Staniland.

The closest I can come, using commercial yarn, to the yarn used for the textiles in question, is a 20/2 wool I found at Robin and Russ. I chose a red, since madder and kermes dyed yarns were mentioned in a number of the textile finds.

Next step was being measured by a pattern-making friend, JeNell Hays, to determine how much fabric I'd need to weave. Then, after calculating how much I'd lose in loom waste, take-up, shrinkage, etc., I ordered the yarn. This was perhaps a risky step, since I hadn't yet woven a sample, and the yarn might prove to be unsuitable. At any rate, I figured I'd need about five pounds of the yarn, to weave 23 yards of fabric on my 22" Gilmore loom, to make an 11 gore Greenland cotehardie.

A sett of 30 epi seemed reasonable for the sample, and fell within the range of the textiles found in

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## Pennsic for the Fiber Artist

by Cerise Moodey

Every August a small town forms around a beautifully wooded lake in western Pennsylvania, where all of the residents are attired in Medieval or Renaissance garb. More than ten thousand re-creationists gather together at Cooper's Lake Campground for Pennsic, the largest yearly event held by the Society for Creative Anachronism. The SCA practices historical re-creations from the Viking era to High Renaissance.

Anyone may attend their events, provided they make an attempt to dress the part.

Participants of the Pennsic War camp out for up to two weeks, engaging in many activities. There are duels between fencers, and armored fighters suit up for pitched battles with warriors numbering in the thousands. Archers skewer targets, occasional catapult missiles fly through the air. Arts and science classes are taught on a volunteer basis over a plethora of topics: music, dance, history, brewing, poetry, illumination and heraldry, just to name a few. And let us not forget our favorite topic - the fiber arts.

The actual classes being taught vary from year to year depending upon who is volunteering to teach. A dozen Arts and Sciences (A&S) tents are made available to the teachers, including a messy area, a loud area, and a large dance tent with a wooden floor. Children's classes are also available. There are frequent classes on the basics of spinning, cardweaving, bobbin lace, natural dyeing, various forms of embroidery, and costuming from every era imaginable. The 'weedwalk' presented yearly is a walking tour of useful indigenous plants, what they are for, what they look like, and where to find them. Some of the local 'weeds' are useful dye plants (but you are requested not to harvest them). Many of the teachers practice applied archaeology. I have seen accurate reproductions made of both spindles and warp-weighted looms. The ladies involved then spun or wove with the tools they had created, learning interesting things about the fibers and fabrics made in period. Most re-

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*Pennsic, Cont'd from pg. 1*

creationists try to use materials proper to their craft, and the Pennsic merchants often have tools of the trade or books that are very difficult to find elsewhere. At the A&S display you can see the fabulous pieces created by other artists, and ask them about their methods and research.

If you have a specific interest and no one seems to be teaching a class on the topic, never fear. It is often possible to find an instructor who does indeed know the subject, and is willing to do a one-on-one class if requested. Many of the merchants are more than willing to demonstrate the use of their wares (even if they don't think you're going to buy anything!). Several of the fiber arts groups have meetings designed for the artist to meet each other and have a forum for discussion. Those I have been aware of include weavers, cardweavers, lacemakers, knitters and embroiderers. There may be more. Pennsic is the only place where I've had people ask to look at my purse, correctly identifying it as a pavy weave.

I have carded wool with Viking combs, observed a sheep become a shawl, spun with drop spindle and wheel, and learned how to set up and weave on a warp-weighted loom. I personally have taught classes on Bayeux Tapestry laid-and-couched work and Mary Queen of Scots' cross stitch, having made three tapestries in this style. I mention this because two were done as group projects with the help of other Scadians, and I have never met as many insane wonderful embroiderers anywhere else. This is the place magic happens.

The SCA is a non-profit educational organization with members all over the globe. If you are interested in attending, Pennsic 32 will be from August 1 to August 17, 2003. More information will be available as the event draws near at [www.Pennsic.org](http://www.Pennsic.org). Pre-registration forms are usually due May 31 (highly recommended if you're camping in a group, as spaces are allocated ahead of time). If you don't mind occasionally waking up to bagpipe music, this is the event for you! Besides, where else can you learn to make Elizabethan underwear?



## A Selected Weaving Bibliography

By Alexis Abarria

This is a partial list of books I have found helpful in my research and weaving. This list is not comprehensive and reflects my focus on twills and band weaving. The opinions expressed are my own, as the cat could not bother to comment.

Addyman, P.V. (ed), *Archaeology of York, The, Volume 17: The Small Finds*, Ebor Press, York, England, 1982, ISBN: 0-906780-02-0. Archaeological text shows pictures of weaves and diagrams of weave structures.

Barber, Elizabeth Wayland, *Mummies of Ürümchi, The*, WW Norton & Company, New York, NY, 1999, ISBN: 0-393-32019-7 Shows clothing, woven bands, and all the mummies anyone could desire in color photos.

Barber, Elizabeth Wayland, *Prehistoric Textiles*, WW Norton & Company, New York, NY, 1991, ISBN: 0-691-00224-x Takes spinning, weaving, and dyeing from the beginning of time. This is the book that started my addiction to medieval weaving.

Barber, Elizabeth Wayland, *Women's Work: The First 20,000 Years*, WW Norton & Company, New York, NY, 1995, ISBN: 0-393-31348-4 Very good read, more like a novel than nonfiction. Focus is on prehistoric more than Middle Ages.

Bennett, J, et al, ed, *Sisters and Workers in the Middle Ages*, University of Chicago Press, Chicago, IL, 1989 ISBN: 0-226-04248-0 Discusses occupations perused by women. Wills and court records back up citings, making this an excellent source for documenting.

Baizerman, Suzanne and Searle, Karen, *Finishes in the Ethnic Tradition*, Dos Tejedoras, St. Paul, MN, 1978, ISBN: 0-932394-01-9 This is an easy to follow book showing how to perform finishing techniques in clear language and drawings.

Bress, Helene, *Inkle Weaving*, Flower Valley Press, Rockville, MD, 1980, ISBN: 0-9620543-1-3 Best inkle weaving book I have found to date. Shows how to build a loom, warp, weave, finish, and design inkle bands. Color schemes are a bit (understatement) dated. Do not believe the bookstores when they tell

you the book is out of print. The publisher is the author's husband.

Broudy, Eric, *Book of Looms, The*, University Press of New England, Hanover, NH, 1979, ISBN: 0-87451-649-8 Gives overview about looms used from prehistoric to modern times. Excellent pictures and sketches.

Bruce-Mitford, Rupert, *Sutton Hoo Ship-burial, The*, Vol. 3, Chapter IV: The Textiles by Elisabeth Crowfoot, University Press, Cambridge, England, 1983, ISBN: 0-7141-1331-x Archaeological text detailing the textiles found on the Sutton Hoo. The multi-volume series is the most comprehensive book written about the Sutton Hoo.

Chandler, Deborah, *Learning to Weave*, Interweave Press, Loveland, CO, 1995, ISBN: 1-883010-03-9 Best how-to weave book I have found to date. It is comprehensive guide to weaving cloth in a variety of techniques. Has a good troubleshooting guide. There is even plenty of room to write in the margins. The only downside to this book is the author has no interest in medieval history.

Ciba Reviews Excellent source of information on a wide variety of historical textiles, clothing, guilds, dyes, and looms. This is a series of publications sent out to their customers.

Crowfoot, Elisabeth, et al, *Textiles and Clothing c.1150-c.1450*, HMSO Publications Centre, London, England, 1992, ISBN: 0-11-290445-9 Archaeological text detailing and cataloguing a London dig. Crowfoot details the finds ranging from tabby woven braids, felting, and clothing.

Davison, Marguerite, *Handweaver's Pattern Book*, A, Margurite Porter Davison, Swarthmore, PA, 1994, ISBN: 0-9603172-0-1 This is a comprehensive book of patterns ranging from tabby and twills to out of period overshot. Caution: double check the patterns and notations for accuracy.

Edelstein, S. & Borghetty, H., ed, *Plictho of Gioaventura Rosetti, The*, M.I.T. Press, Cambridge, England, 1969 English translation of medieval dye recipes. Good source to prove that almost any color can be created. Caution: check for toxic ingredients and follow modern dyeing safety precautions.

Geijer, Agnes, *History of Textile Art, A*, Sotheby Parke Bernet Publications, Covent Garden, London, 1979, ISBN: 0-85667-055-3 Discusses bands, tablet weaving, dyeing techniques, and looms.

Harte, N. B. and Ponting, K. G., eds, *Cloth and Clothing in Medieval Europe*, Heinemann Educational Books, Ltd., London, England, 1983, ISBN: 0-435-32382-2 This book contains a variety of articles ranging from Birka finds, weavers, gold thread, tablet weaving, types of cloth woven, costs and wages, and patterns.

Hoffmann, Marta, *Warp-Weighted Loom, The*, Hestholms Boktrykkeri A.s, Oslo, Norway, 1974, ISBN: 82-00-08094-3 This is a comprehensive book concerning warp-weighted looms, their weavers, and weavings. Some of this work has been supplanted by later finds.

Jorgensen, Lise, *North European textiles until AD 1000*, Aarhus University Press, Aarhus, Denmark, 1991, ISBN: 87-7288-416-9 Author relates types of weaves to geography and includes data on thread counts.

Rogers, Penelope Walton, *Textile Production at 16-22 Coppergate*, Council for British Archaeology, York, UK, 1997, ISBN: 9-906780-97-9 Discusses raw materials for weaving, spinners, looms and other topics of archaeological interest.

Rogers, Penelope Walton, and Wild, John, *Textiles in Northern Archaeology: NESAT III: Textile Symposium in York 6-9 May 1987*, Archetype Publications, London, 1990, ISBN: 1-873132-05-0 Like any of the six NESAT books, this one has a great many useful articles written by the best in textile archaeology. Difficult to find.

Rogers, Penelope Walton, *Textiles, Cordage and Raw Fibre from 16-22 Coppergate*, Council for British Archaeology, York, England, 1989, ISBN 0906780799 Discusses wool, silk, and flax, diamond twills, dyes used and other topics of archaeological interest.

Spies, Nancy, *Ecclesiastical Pomp & Aristocratic Circumstance*, Arelate Studio, Jarrettsville, MD, 2000, ISBN 0615116817 Comprehensive book for tablet weaving. Gives many photos of historical remnants and reconstructs them. The book has many charts for pick up work. It is an invaluable resource for

Complex Weavers' Medieval Textile Study Group

anyone interested in either ecclesiastical weaving or tablet weaving. Caution: assumes a strong knowledge of tablet weaving techniques.

Wild, J. P., *Textile Manufacture in the Northern Roman Provinces*, Cambridge University Press, London, England, 1970, ISBN: 521-07491-6 This book covers very early period archaeology. It discusses band looms, spinning, dyeing, and weaving.

Wild, John, *Textiles in Archaeology*, Shire Publications LTD, Aylesbury, England, 1988, ISBN: 0-85263-931-7 This book covers finishing, loom dimensions, and rigid heddles.

### About the author:

Lady Cassandra of Glastonbury (AOA, CW) is a chururgeon (regional and baronial), and a marshal of fence in Blackthorne, within the Barony of Andelcrag. She is an English lady who enjoys tending her loom, garden, and stillroom.

Alexis Abarria ([loom@gte.net](mailto:loom@gte.net)) weaves both inkle bands and fabric and is learning how to spin and prepare fibers Her website url: <http://homepages.about.com/cassandra777/theloomybin/>

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### Upcoming events:

#### Art Institute of Chicago:

*The Medici, Michelangelo, and the Art of Late Renaissance Florence*  
November 9, 2002–February 2, 2003

*Renaissance Velvets and Silks*

December 18, 2002–April 13, 2003

<http://www.artic.edu/aic/exhibitions/renaissance.html>

#### Indianapolis Art Museum:

*The Print in the North—The Age of Albrecht Dürer and Lucas van Leyden: Selections from The Metropolitan Museum of Art*  
September 7, 2002 - February 23, 2003  
<http://www.ima-art.org/>

#### The Textile Museum:

*The Classical Tradition in Anatolian Carpets*  
September 13, 2002 - February 16, 2003  
<http://www.textilemuseum.org/exhib.htm>

### 14 C. Dress, Cont'd from pg. 1

London. I put on an 11" wide warp, figuring that take-up would reduce the actual width to 10", which makes calculating percent of shrinkage after washing simpler (besides, I was taught to do it that way). I planned to do a tabby-woven, fulled, brushed and sheared fabric for the dress.

I have a 12 dent reed on the loom, so I threaded it alternating two and three threads per dent, then threaded a straight draw on four harnesses of the loom. It just seemed simpler than using eight harnesses to weave tabby, and besides I could weave a bit of twill sample if I felt like it. The yarn gave no problems during the warping process.

When I began to weave the header, I discovered that it was almost impossible to make a shed. The yarn clung together like brushed mohair, though it appeared shiny and smooth. After liberal applications of Aqua Net Super Hold hairspray, I finally was able to get in the header and begin to weave. I put in a header of rag strips, then wove a half inch of tabby, then went back and hemstitched the beginning of the weaving so it wouldn't unravel when I washed it. Then I released the brake on the warp beam so I could advance the warp a little. Whoops! The warp beam has a ratchet and gear mechanism, and the tension on the warp caused the whole beam to unwind, zip, and all my warp and the tie-on rod and all were now sagging all the way to the floor between the harnesses and back beam. I got the warp, paper, etc., all wound back onto the beam, but my tension was now off, and no amount of adjusting from front or back was able to make up for it. This was the first warp on that loom, and I didn't expect the brake to behave that way, or I'd have taken steps to make sure only the few inches I needed unwound at a time. It's easy enough to do with a small loom, just stand to the side and hold onto the beam as you release it, then hold it while you wind the other forward.

After weaving a few more inches, it became apparent that the sett was too high for this yarn. There was almost no draw-in, and I had to beat hard to be able to get a weft count of 28 ppi. Still, it didn't appear to be too stiff, and I had hopes of it fulling up nicely once I'd washed it.

I had only two warp threads break, despite all the beating and other mistreatment. I had two wefts pull

14 C. Dress, Cont'd

apart. I think because of the way I turned the shuttle that I just unspun them.

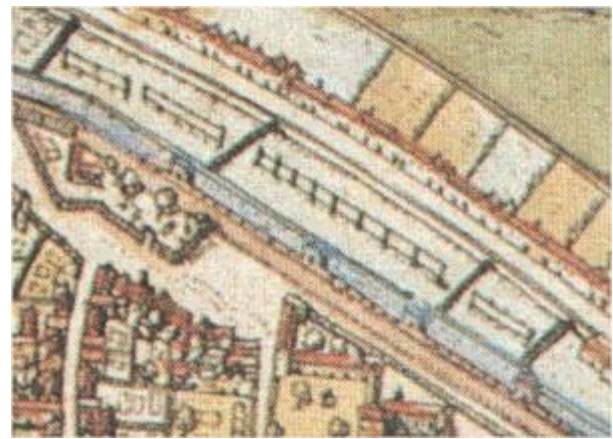
When I had woven all but the last six inches or so of the warp, I hemstitched the ending, then put in a spacer and wove a little bit more, to keep for my own records. I divided that bit in half, washing one half with the main sample and keeping the other half just as it came from the loom.

I put the samples into the washing machine, with a couple of sweatshirts for ballast, and washed them in warm water with my regular detergent. I agitated them for two minutes, then turned off the agitation and let them sit for about a half an hour. Then I advanced the cycle to rinse, and let the normal cycle proceed from there. I hung the main sample up to line dry, but tossed the small sample into the dryer with the sweatshirts.

The sample from the dryer did not shrink much more than the line-dried sample, which was under five percent. It did not full. It did not fluff. I couldn't brush up a nap. I thought that surely, as sticky as it was on the loom it would come out of the dryer with fuzz standing up half an inch high. Not only that, but the washed and dried samples now look like some strange plaited twill, with tracking going every which way. It is only slightly heavier than some commercial yardage I used for a surcote, but I think that twenty three yards of the fabric will be far too heavy for a dress for Southern California. Therefore, more sampling is in order. I plan to try again, this time with a slightly more open sett, and to weave both plain and 2/2 twill. Hopefully, I will have both samples and photos of the finished dress for next year's issue.



St Dorothy, Netherlandish or North German, ca. 1500  
The Fridsam Collection, Metropolitan Museum of Art



Detail from a 1572 map of London by Frans Hogenberg. It shows close-up detail of tenter-frames, situated on the outer side of the city wall ditch. One frame is empty but all the other ones have cloth stretched out along them

Crossword

A S L O X F O R D W R A P Q  
 T I X E I T O E I A E V E N  
 T W I L L E O N M R M F I T  
 V C L B W V B A N P U A T G  
 W E B U E L T S I R E B S P  
 R O B O T E K Q T R L R U K  
 B V T D L V U N Y U K I M C  
 E E G A S E G A U Z E B M U  
 I R S H A D O W S Y C R E H  
 D S A M I T E X T I A O R M  
 E H T W I L E L L A N N A C  
 R O I L R E P A I D V S N R  
 W T N E V E R M A Y A O D A  
 A H A T M A H P P O S N W C  
 N E E D E T I A L P I E I K  
 D T A T T E R S A L L L N L  
 O N B A S K E T A Q U E T E  
 T A P E S T R Y N R D E E R  
 T O E I N G I R N I D E R A

basket  
 beiderwand  
 bronson  
 cannalle  
 canvas  
 crackle  
 damask  
 diaper  
 dimnity  
 double  
 eingimi  
 filler  
 gauze  
 huck  
 lampas  
 leno  
 mando

matelasse  
 opphamta  
 overshot  
 oxford  
 pique  
 plaited  
 reed  
 rep  
 rib  
 samite  
 satin  
 shadow  
 summer and winter  
 tapestry

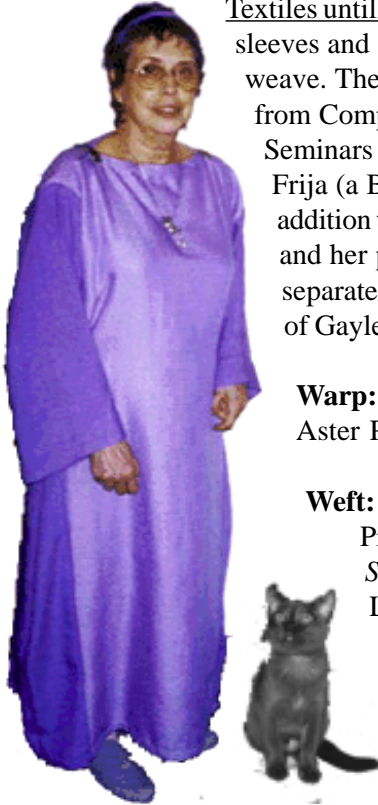
taquete  
 tattersall  
 twill  
 velvet  
 warp  
 web  
 weft

## Pictures:

### Gayle Bingham and Frija

The weave is a 2/2 lozenge twill for the front and back panels. This weave is found in Bender-

Jorgensen's North European Textiles untill 1000 AD. The sleeves and side pieces are plain weave. The picture of Gayle is from Complex Weavers' Seminars Fashion Show 2002. Frija (a Burmese) is a new addition to Gayle's household, and her picture was added separately from the picture of Gayle.



**Warp:** 30/2/4 Tencel,  
Aster Purple

**Weft:** *Front & Back:*  
Pink & Light Blue  
*Sides & sleeves:*  
Light Blue

**Sett:** 28 epi

### Web sites of interest:

Medieval wool and Cloth exports

<http://www.le.ac.uk/hi/bon/ESFDB/MMB/mmb.html>

Companie of Saynte George

[http://www.companie-of-st-george.ch/dragons\\_1.phtml](http://www.companie-of-st-george.ch/dragons_1.phtml)



## News from the Coordinator

by Nancy M. McKenna

The primary news is the results from my little survey. From the replies, in future issues the members want to see:

- ❖ Brocades
- ❖ Weaving for Wearables
- ❖ Fine Threads
- ❖ Taquete/Samitum/Lampas
- ❖ Silk Road Textiles
- ❖ Coptic/Islamic Textiles
- ❖ List of MTSG members

Enclosed with this newsletter is a copy of the list of members as of December 1. I do not include this information in the body of the newsletter (unlike other study groups) because I have noticed that this newsletter is seen by many more persons than accounted for by the membership list via word of mouth and sharing amongst colleagues. The list is for personal use by members only. If you did not send back your survey but have suggestions and comments, or have chosen an issue to write for, do send them to me. I especially need articles for June, Sept, & Dec.

The March issue should include:

- ❖ the first installment of a cartoon
- ❖ Perugia Towels
- ❖ Cleaning Textiles
- ❖ Your article?

Thank you for your weaving! This issue contains the largest number of samples woven for a Medieval Textiles Newsletter to date: 5 and counting! Good job, Members! As related in another article in this issue, much of this cloth is slated for reproduction clothing. Tell us about your weaving for your wearables - and send pictures. As long as I can manage it, the newsletter will be in color, so take advantage and send in your pictures! Physical pictures are fine - I have a scanner. And let me know - how do commercial patterns rate for reproduction sewing? What is your favorite brand, your least favorite brand & why?

Many members have 8 or more shafts and like weaving "complex" cloth. Tell us about your brocades and such!