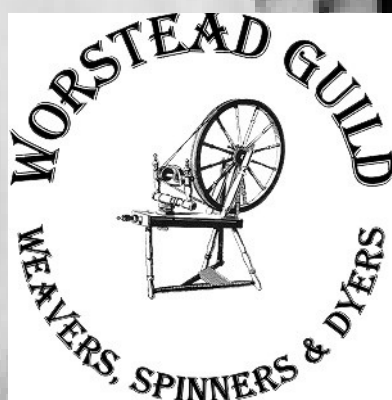


# WOOL & WEAVING OUR NORFOLK HERITAGE

## *EDUCATION PACK*

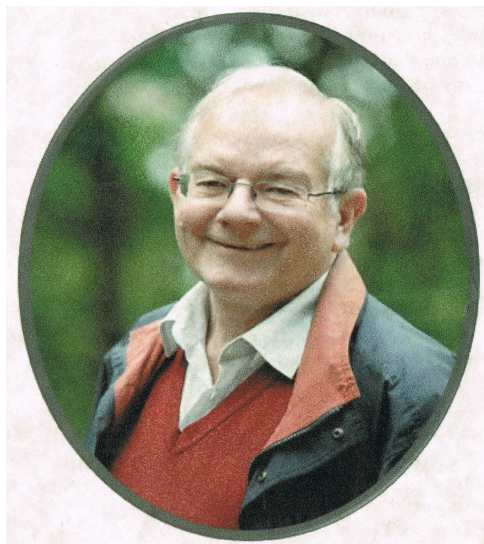


## Dedicated to Brian Morgan

*“The crafts of weaving, spinning and dyeing were once an essential part of life in Norfolk. The Worstead Guild takes pride in being a teaching guild and this HLF grant gives an outstanding opportunity to introduce a wide range of newcomers to these traditional activities. In addition those who are already practitioners will be able to enhance their skills. There is a chance to raise awareness of the rich local heritage and demonstrate that traditional crafts have a place in the modern world and that they can be learnt and enjoyed today.”*

The words of **Brian Morgan**, chairman of the Worstead Guild of Weavers Spinners and Dyers on the news that the Spinning a Yarn in Worstead Project had succeeded in its £44,000 Heritage Lottery Bid.

The Spinning a Yarn Project is indebted to the drive and commitment from Brian and his wife, Pat to get the project off the ground. Sadly he was not able to see the project through to completion, but it is in his honour we dedicate these pages – to his memory and hope that his passion and these words may inspire a new generation to take up the skills for which the County and in particular the village of Worstead, is so famous.



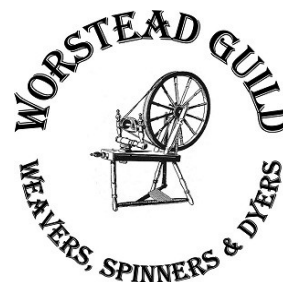
**Brian Morgan MSc MIBiol  
1937-2012**

**Chairman of the Worstead Guild of  
Weavers Spinners and Dyers 2004-2012**



## Table of Contents

INTRODUCTION.....	4
KEY DEVELOPMENTS IN TEXTILE HISTORY.....	5
A TEXTILE TIMELINE FOR ENGLAND.....	6
THE TEXTILE TRADE IN ENGLAND.....	11
EDUCATIONAL RESOURCES.....	12
PREPARING FLEECE FOR SPINNING.....	13
WOOL COMBING.....	13
SPINNING WOOL.....	14
ANCIENT LOOMS.....	15
STORYTELLING AND SONGS ABOUT TEXTILES.....	17
COMMON TERMS WITH TEXTILE REFERENCES.....	17
NAMES OF PEOPLE & PLACES.....	18
ACTIVITIES.....	19
PAPER WEAVE.....	19
GOD'S EYES.....	19
PEG LOOMS.....	20
FINGER STICKS.....	21
CARDBOARD LOOM/TRAY LOOM.....	22
INKLE WEAVING.....	22
BRAID MAKING.....	23
FRIENDSHIP BRACELETS .....	24
RESOURCE LIST.....	25
ACKNOWLEDGEMENTS.....	26



## INTRODUCTION

The purposes of this pack are to introduce:-

- The study of the rich textile history of England in general and Norfolk in particular.
- The practical skills needed to produce a piece of woven material.

The area and period of time being considered is very selective since weaving is the earliest craft developed by man even pre dating pottery and has a worldwide distribution. The early skills which developed would have included making twines, ropes, basket making as well as material for clothing and domestic use. There is much evidence that hand spinning was an accomplishment of early man but whatever the fibres used and however they spun it is a time consuming process.

Whatever materials are used in spinning, time must be spent in preparation. Perhaps plants such as nettle and flax were among the first to be used, but extracting the desirable fibres takes a lot of time. Seeds need to be removed from the seed heads of the cotton plant and the wool of sheep needs cleaning and carding or combing. The silkworm's cocoon yields long length of silk which have to be plied together. Regardless of the starting material it is only when a satisfactory yarn is produced that weaving can commence.

It is worth thinking about the amount of use textiles usually received before finally being discarded. Because of their value and the time taken to make them textiles, whether in the form of domestic items of clothing, were often passed to a second or more users either during a lifetime or as bequests. Also second-hand clothing dealers (fripperers) flourished in many places especially cities such as London and Paris in the 13<sup>th</sup> and 14<sup>th</sup> centuries. Trimmings of all kinds might be removed from garments and re-used on another. Therefore textiles might be in very poor condition before finally being discarded.

Besides wear and tear, damp, mildew, moths, fire, chemicals and bacteria in the soil both during and after use affect the survival of textiles and the equipment used to make them. In waterlogged soil linen suffers because cellulose fibres break down rapidly under acid conditions and fungal attack. If dyes were used the rate of decay may be affected since some mordants (used to set the dyes) increase the rate of decay. Woollen materials have a greater tendency to become permanently stained by materials in the soil than those made of silk. Where woollen textiles have been packed tightly together they sometimes retain more of their original colouring.

The very special conditions which favour the preservation of ancient textiles are:- extreme cold, e.g. Northern Siberia, wet, the cold anaerobic bog lands of Scandinavia and the hot, dry conditions found in the Sahara, the Andes and the coastal plains of Peru.

## KEY DEVELOPMENTS IN TEXTILE HISTORY

~20,000 BC Evidence has been found showing the use of cords and some fine needles from this time

~6000 BC Some 14,000 years later spindle whorls were in use and woven fabric has been found in the pyramids of Egypt dating from ~5000 B.C.

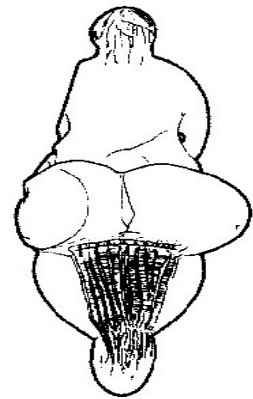
~2500BC Finds have been made of textile scraps, spinning whorls (and other artifacts) in Swiss Lake Dwellings indicating an advanced spinning/weaving capability

~1500 to ~1100 BC In Jutland a cape and long kilt have been found amongst garments found in oak coffin graves in Danish boglands. They are believed to date from early Bronze Age.

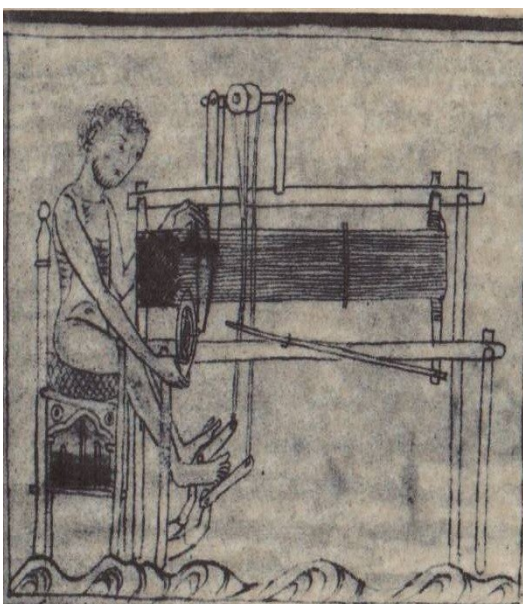
~500 BC to ~400 BC In 1953 a rug made from fine spun wool in natural colours was found in an ice-bound grave in Pazyryk in the Altain Mountains of Southern Siberia. The rug measured approximately 2mx2m and was about 2.54mm thick with about 230 knots per square inch.

The rug was probably made by Scythian nomads in ~4<sup>th</sup> or 5<sup>th</sup> century B.C. The design is a central square with rosettes and a 5 band border containing rows of winged griffins, grazing elk and horsemen. The technique used is advanced and therefore had probably been in use for a very long time, perhaps at least 1000 years. The rug is now in the Hermitage Museum, St Petersburg.

~500 B.C. to A.D.750 the spindle was mechanised, perhaps in India where a wheel known as a 'charkha' evolved, possibly derived from the Chinese reel used to unwind silk from cocoons.



*Palaeolithic 'Venus' figure wearing a skirt of twisted string from Lespugue, France ca. 20000 B.C. (Courtesy of Musee de L'Homme, France)*



*Naked Weaver on treadle loom circa 1200 AD  
Published in The Book of Looms by Eric Broudy, Studio Vista 1979*

*Courtesy of the Master and Fellowes of Trinity College, Cambridge*

AD 1298 The earliest written mention of a spinning wheel in Europe occurs in the Guild regulations of Speyer. The later European version was mounted on legs and was known as The Great Wheel (and a variety of regional names). (see image on next page)

~AD 1480s In the last decades of the 15<sup>th</sup> century hand spinning wheels with flyer spindles were made. The treadle drive was developed about 100 years later.

Developments of the wheel and looms took varying periods of time before they were adopted. The old methods persisted for many years alongside the new in many areas.

## A TEXTILE TIMELINE FOR ENGLAND

*Compiled by Brian Morgan*

<b>43</b>	Roman Conquest starts
<b>60-61</b>	British revolt under Boadicea (Queen of the Iceni)
<b>~62</b>	Romans occupy Iceni palace, 3 miles south of where Norwich stands today
<b>~65-70</b>	Venta Icenorum (Caistor by Norwich/ Caistor St Edmunds) settled by Romans – fortified garrisons
<b>383-410</b>	Roman legions leave 'Saxons' begin to settle – first as mercenaries, later as invaders.
<b>425</b>	Saxons invade Anglia. Continuous conflict Saxon v.Iceni – eventually co-exist under Iceni rule.
<b>827</b>	Saxon law forbade a woman 'to make clothes, comb wool, beat hemp or shear sheep on a Sunday'. Large numbers of spindle whorls have been recovered from sites dated to this period, suggesting spinning was very widespread.
<b>892-910</b>	First reference to Northwic (Norwich)
<b>1000-1500</b>	The introduction of the horizontal loom (probably from the Near East) made it possible to weave together long lengths of cloth and sparked the growth of textile production. The warp weighted loom was not entirely superseded. Much cloth production was centred on Flanders which depended on having access to English wool.
<b>1060</b>	Burgh of Norwich 'one of the largest in the kingdom' Domesday Book
<b>1100</b>	Flooding in the Low Countries meant that Flemings left their native land and settled in East Norfolk.
<b>1150</b>	Norwich expanded to become the 6 <sup>th</sup> largest town in England as the agricultural development of East Anglia took place. Continental trade increased and Kings Lynn develops from a small late Saxon settlement to an important port.
<b>1200</b>	Kings Lynn developed into the 5 <sup>th</sup> largest port in England because of continental trade.
<b>1300s</b>	<p>Huge flocks of sheep and intensive farming were the basis of this areas economy and cloth was produced from long coarse wool of the west Norfolk sheep.Until this date the city may have produced heavy woollen cloths rather than the lighter worsteds made in Worstead and Aylsham.</p> <p>Terms such as 'Norwich cloth' and 'Norwich whites' are found in early references and late13th century papers show fullers, shearmen and the presence of tenter grounds in the St Giles area of the City. Coupled with the evidence of dyers' workshops along the southern bank of the river Wensum it does seem that this area was at the centre of textile activity.</p>
<b>1315</b>	Earliest reference to worsted production in Norwich. Following complaints by the merchants an alnager was appointed to monitor the measurements of worsteds made in 'Northwyc', as well as Norfolk, Suffolk and elsewhere.

- 1327** Edward III (1327-1377) Woollen and worsted trade flourishes during his reign. Taxes and on wool pay for the early stages of the Hundred Years War.
- 1336** Edward III encouraged local textile trade by bringing Flemish weavers to England, presumably to improve production techniques and introduce new designs. Many settled in Worstead and Norwich but others went to other places, eg. Bury St Edmunds and Lavenham.
- 1349** The Black Death (Plague) hits Norfolk – many settlements decreased in size or were totally abandoned. More than 100 Norfolk villages mentioned in the Domesday Book (1086) had disappeared by 1500. Part of the church at Cley was never finished, possibly because of the plague but the later rebuilding shows that the port remained prosperous and wool was exported until the Glaven estuary silted up.
- 1381** Peasants revolt sparked by the Poll Tax. In Norfolk Geoffrey Litster, a dyer of Felmingham led the rebels and for a week controlled Norwich – Henry Despenser, the soldier Bishop of Norwich, captured and hanged Litster at North Walsham
- 1385** St George's Guild (Norwich) founded. Guild granted Royal Charter in 1417 by Henry V. The only guild to survive the destruction of guilds in 1548, it remained in a diminished form until 1732
- 1391** Aliens recorded as living in the traditional weaving districts of St Giles and St Andrew. Leet court records show attacks on 'Dutchmen'
- 1397** Norwich population 15000. Common Inn and Worsted Seld built to the North of Market place, all cloth had to be displayed here.
- 1430** Robert Toppes, an extremely wealthy merchant who exported undyed cloth, built a first floor trading hall on an earlier 14<sup>th</sup> century building. After his death Dragon Hall had many owners and was sub-divided
- 1467** Toppes left money to every church and religious house in Norwich. He also left money to the parish churches in the worsted parishes.
- 1497** Parliament passed an Act for 'the taking of Apprentices to make Worsteads in the County of Norfolk'. At the head of the Act is Henry VII's monogram (HR) This is the oldest Act stored in the House of Lords Record Office
- 1500s** Camlet (Camblet and several other spellings) was an expensive cloth imported from at least as early as the fourteenth century. Originally made from silk and possibly either camel's hair or mohair. From the early 16<sup>th</sup> century varieties of the basic camlet weave were developed by the Norfolk worsted weavers, especially in and around Norwich. The material could be finished to give a watered or embossed effect. The types had different names, eg. Buffin and paragon and varied uses from lightweight clothing to curtains and hangings. The Flemish weavers in Norwich also developed new ways of weaving the Spanish-rug or blanket during the 16<sup>th</sup> century.
- 1552** The label Dornick (Dornix or other variant spellings) was usually given to a textile made with a linen warp and a woollen weft, yet another introduction by the Flemish weavers. Dornick had many household uses, eg. Tablecloths and coverlets, and the trade persisted for about 200 years. Many weavers were known as dornick weavers.
- 1554** The mayor and Aldermen of Norwich 'brought in strangers from parts beyond the sea' and provided them with looms that they used to produce much improved fabrics using Norfolk wool.

- 1558** During the reign of Elizabeth I (1558-1603) some 50,000 refugees arrived from the Netherlands, men, women and children. Most settled in London and Norwich with others in Sandwich, Maidstone, Southampton, Stamford, Colchester, Dover, Canterbury and a few other towns.
- 1560** Earliest record of the term 'new draperies' seems to come into use late in Queen Elizabeth's reign. Flanders produced a better range of fabrics than similar ones made in England. Dutch and Walloon textile workers generally had a very good reputation for production of fashionable fabrics.
- 1561** A group of immigrant families (406 persons) were directed upon the Queen's order to settle in Sandwich to carry out textile production and fishing. Typically immigrants were directed where to settle.
- 1564** Mayor of Norwich, Thomas Sotherton, tried to revive the textile trade '*by reason that the commodoties of woorsteed makynge is greatly decayed*' by attracting newcomers and made an appeal to Thomas, Duke of Norfolk.
- 1565** Duke of Norfolk granted licence to bring strangers to Norwich. '*therty Douchmen of the Low Countreys of Flaunders*' with their families and servants, might settle in order to exercise '*the faculties of making Bays, Arras, Says, Tapstrey Mockdoes, Stamens Carsay and such other outlandish commodoties as hath not been used to be made within our realm of England.*' Flemings, refugees from religious persecution by Duke of Alba in Low Countries settled in Norwich. The Privy Council often discussed attracting skilled immigrants, not only for textiles, but also other crafts. They were not only directed where to settle, but also seen as a useful source of revenue by the exchequer.
- 1578** '*New Drapry*' appears in a patent that authorized the aulnage (supervision of quality) of new stuffs
- 1580** During the 1580's Flemish and Walloon weavers made up about one third of the City's population. The weaving industry introduced the '*New Draperies and Patterns*' and Norwich textiles gained in importance.
- 1666** Act of Parliament passed to enforce the use of woollen shrouds;  
  
*'No corpse of any person (except those who shall die of the plague) shall be buried in any shirt, shift, sheet or shroud, or anything whatever made or mingled with flax, hemp, silk, hair, gold or silver, or any stuff or any thing, other than what is made of sheep's wool only... or be put in any coffin lined or faced with another material but sheep's wool only.'*  
  
Affidavits were required and severe penalties imposed for failing to comply or not producing an affidavit. In 1700 a fine of £5 was imposed on Thomas Deye's executors for burying him in a linen shroud. Act was not repealed until 1814.  
  
Dolberline, a lace made from wool, originally from Flanders, was used for funerals in order to comply with this act.
- 1698** Celia Fiennes made her journey on horseback through England. On reaching Norwich she wrote '*markets for every kind of produce under the sun – the textile industry employed men and women in spinning weaving dying scouring fulling or bleaching their stuffs*' the whole city '*looks like what it is, a rich, thriveing industrious place*'

<b>1700s</b>	<p>The heyday of Norwich Stuffs (Norridge stuff) was in the late 17<sup>th</sup> and 18<sup>th</sup> centuries when the city had both a flourishing export trade and a good internal market. Norwich had its own Company to regulate the manufacture of stuffs.</p> <p>In East Anglia the New Draperies show a decline in sales as the 18<sup>th</sup> century progressed. Rural weavers in Essex and Suffolk suffered from the import of Indian cotton calicoes, Asian cottons and silks which meant their sales of locally produced cloth fell. In Norfolk there was also a decline, especially amongst the producers of Norwich Stuffs and the sales of camlets, bombazines and worsteds fell.</p>
<b>1780s</b>	<p>Norwich Shawls produced, initially of cotton with hand embroidery and later 12ft wide seamless shawls using worsted yarn on a silk warp.</p> <p>Meanwhile, Lancashire and Yorkshire mills begin to use water power for automatic weaving which later develops into steam powered spinning and weaving mills in the Bradford area.</p>
<b>1802</b>	Fillover shawls developed – the design could be woven into the shawl rather than embroidered onto it. These shawls were woven on complex draw looms and were very expensive. Most were of a mixture of worsted yarn and silk. When the fashions changed from crinolines to bustles the shawls went out of fashion and thus began the decline fo the shawl industry.
<b>1808</b>	Defying progress, Norfolk continues to hand spin yarn but the development of powered looms led to an increased demand for yarn which the hand spinners struggle to meet.
<b>1818</b>	By this time most of the yarn used by Norwich weavers was actually spun in Bradford. The West Riding mills made heavy demands on the power spun yarn and consequently the Norwich weavers sometimes had difficulty in obtaining supplies.
<b>1830</b>	<p>The Jacquard Loom was developed but Norwich weavers were slow to adopt it.</p> <p>During this time there was a gradual movement of skilled workers from Norwich to Halifax where Norwich products were being copied and produced more cheaply.</p>
<b>1833</b>	The Norwich Yarn Company was established to raise capital to build two mills.
<b>1836</b>	Power spinning of worsted yarn started at the Albion Mills in King Street.
<b>1839</b>	Norwich Yarn Company's two mills at St Edmunds (spinning) and St James (weaving) start production. (these premises later became Jarrold Printing Works)
<b>1869</b>	Only 9 firms left making fancy fabrics and Norwich Shawls.
<b>1882</b>	John Cubitt, the last working weaver in Worstead, died aged 91



*Large floor loom on display at St Mary's Church, Worstead (image B Morgan)*

## THE TEXTILE TRADE IN ENGLAND

By the 10<sup>th</sup> century merchant guilds were established for mutual protection when transporting goods and later craft guilds were formed. In England it is possible to identify different stages of industrial development:

- a) the worker owned both the material and the means of production
- b) the worker owned the means of production but not the material
- c) the worker owned neither the production nor the material.

The first system was one in which all the different classes of textile workers bought their supplies of materials and then sold it after they had worked on it. The spinner bought wool and sold yarn. Weavers bought yarn and sold cloth. Fullers bought raw cloth and sold it fulled to the shearman. After the shearman had dressed the cloth it was sold on sometimes to the dyer who also bought wool for dyeing.

This system gave rise to the craft guilds where each specialist group banded together for mutual benefit. Guild membership could only be achieved after a period as an apprentice (2-7 years) followed by a spell as a journeyman (salaried position). At the end of this time an exceptional piece of work had to be produced which, if judged to be of sufficient quality by the Guild, might lead to the journeyman becoming a master. There had to be sufficient trade in the area to permit a new master to set up on his own. Often the guild regulations were designed to maintain the standard of workmanship and regulate the prices that could be charged. Guilds also provided care for their members during periods of poverty, ill-health or if funeral expenses were needed.

The significance of the woollen and textile trade can be judged by the fact that in the late eighteenth century an abstract was published of "laws relating to the Over 300 laws then on the statute book were listed; this was many more than relating to any other commodity or trade. Everything from shearing to the finishing of cloth was covered by a complex set of regulations some of which were designed to give the industry protection against foreign competition.

The manufacture of cloth affected every part of the kingdom since spinning was a cottage industry practised in the majority of households, weaving was also commonplace. Obviously some areas developed specialities and became well known for their skill.

The wool and textile trade was an integral part of the domestic and commercial life for England for many hundreds of years. As a result we have churches and fine houses built with the profits of the trade. There are also family names, stories, rhymes, songs and a wealth of examples to be found in the written and spoken language as well as historical textiles. All these areas present opportunities for further study and further investigation.

It is often thought that any form of spinning and weaving necessarily involves expensive and complex equipment but this is certainly not the case. Not only are the finished structures of interest whatever starting materials are used but the process of selecting materials for type, texture and colour is of creative value.

With this pack we hope to introduce you to a number of simple techniques to create textiles using simple methods and materials.

This pack links to a number of curriculum areas, in particular History, Art, Design Technology, Literacy and Citizenship.



## EDUCATIONAL RESOURCES

An excellent selection of educational resources are available from the British Wool Marketing Board [www.britishwool.org.uk](http://www.britishwool.org.uk).

Fact sheets may be viewed online as pdf's and printed free.

These include:

- British Sheep Breeds and Their Wool
- The Shepherds Calendar
- The Processing of British Wool
- Wool Statistics

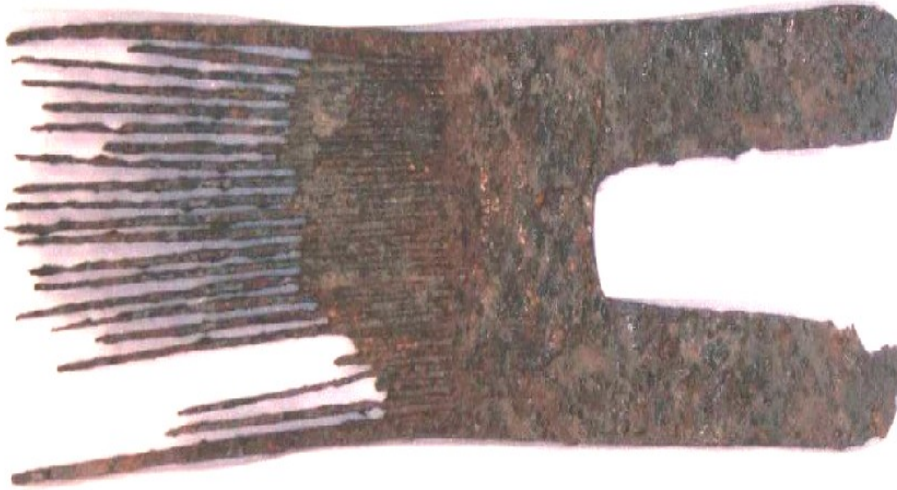
***“where hand-weaving is taught its great value is to educate the eye to perceive good design and develop the sense of beauty and the joy of creation, to train the brain to use judgement, and to teach the hand accuracy and dexterity.”***

**Violetta Thurstan, Weaving Patterns, Dryad Press**

## PREPARING FLEECE FOR SPINNING

### WOOL COMBING

Two examples of wool combs used in the preparation of worsted yarn:



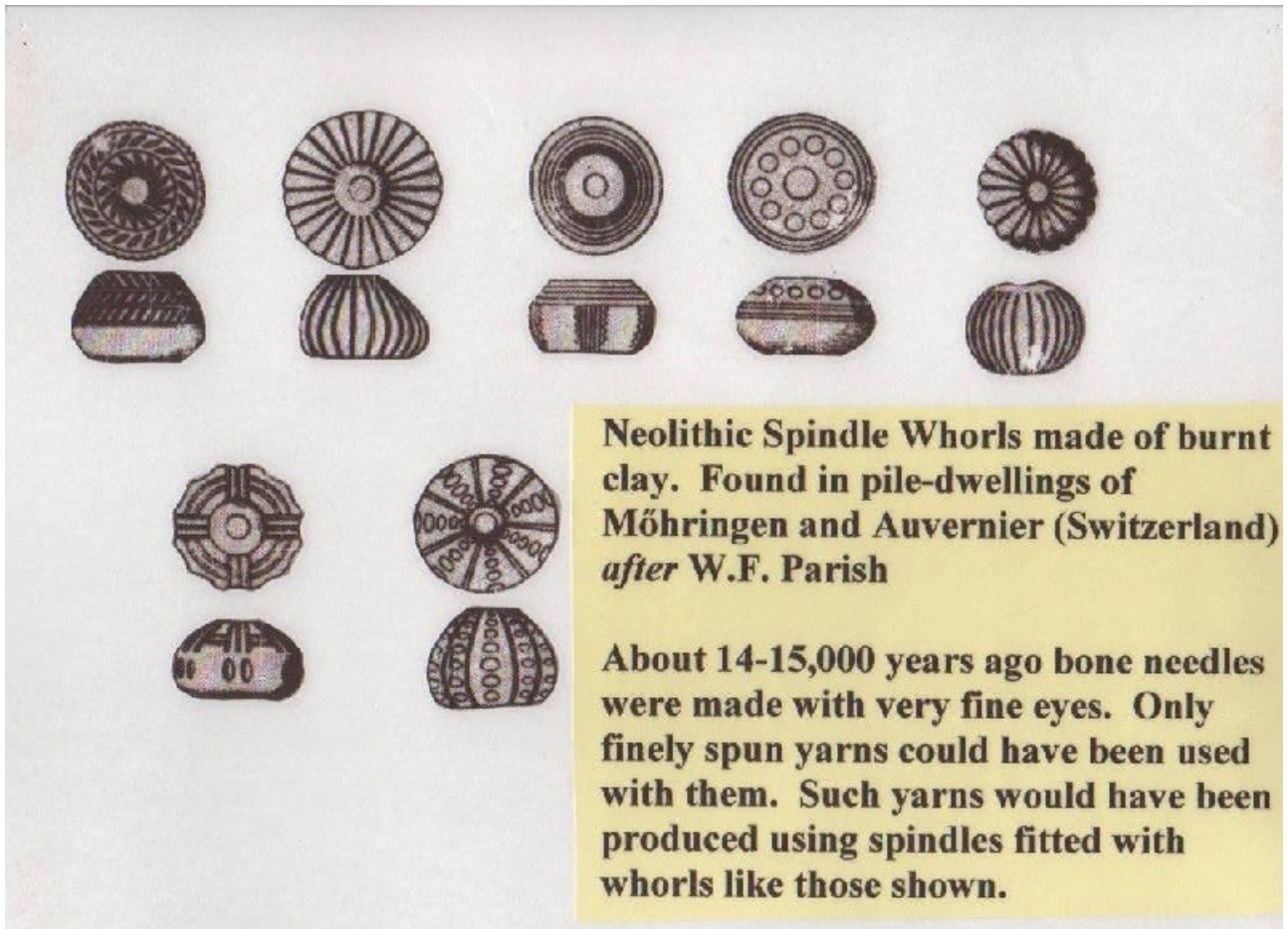
*Iron wool comb (Roman) found at Caistor by Norwich (Venta Icenorum) now at Castle Museum, Norwich. Image courtesy of NMAS*

*There is a wall painting in Pompeii showing a comb like this in use.*



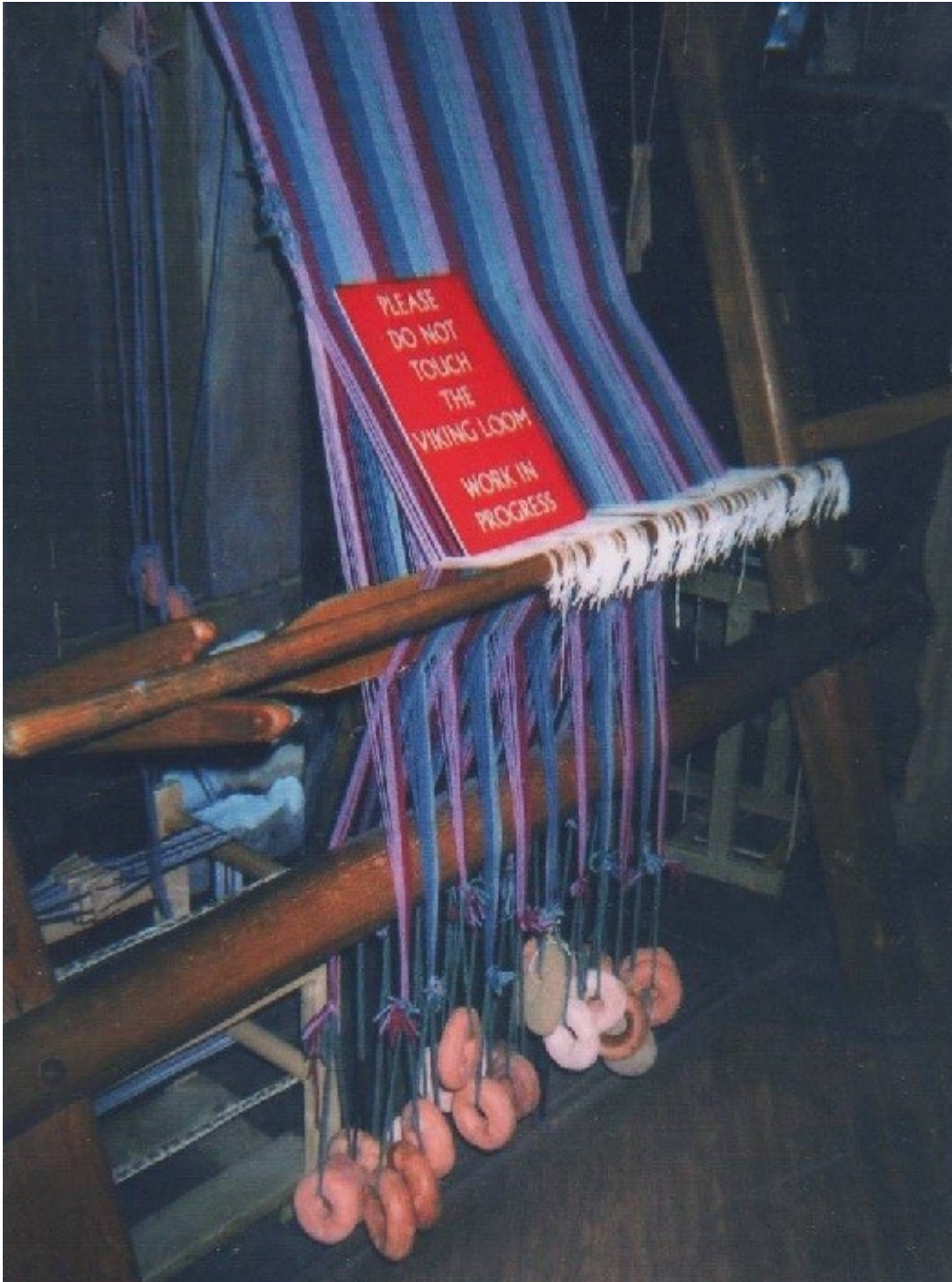
*Two views of a Worsted Wool Comb (Image B. Morgan)*

## SPINNING WOOL



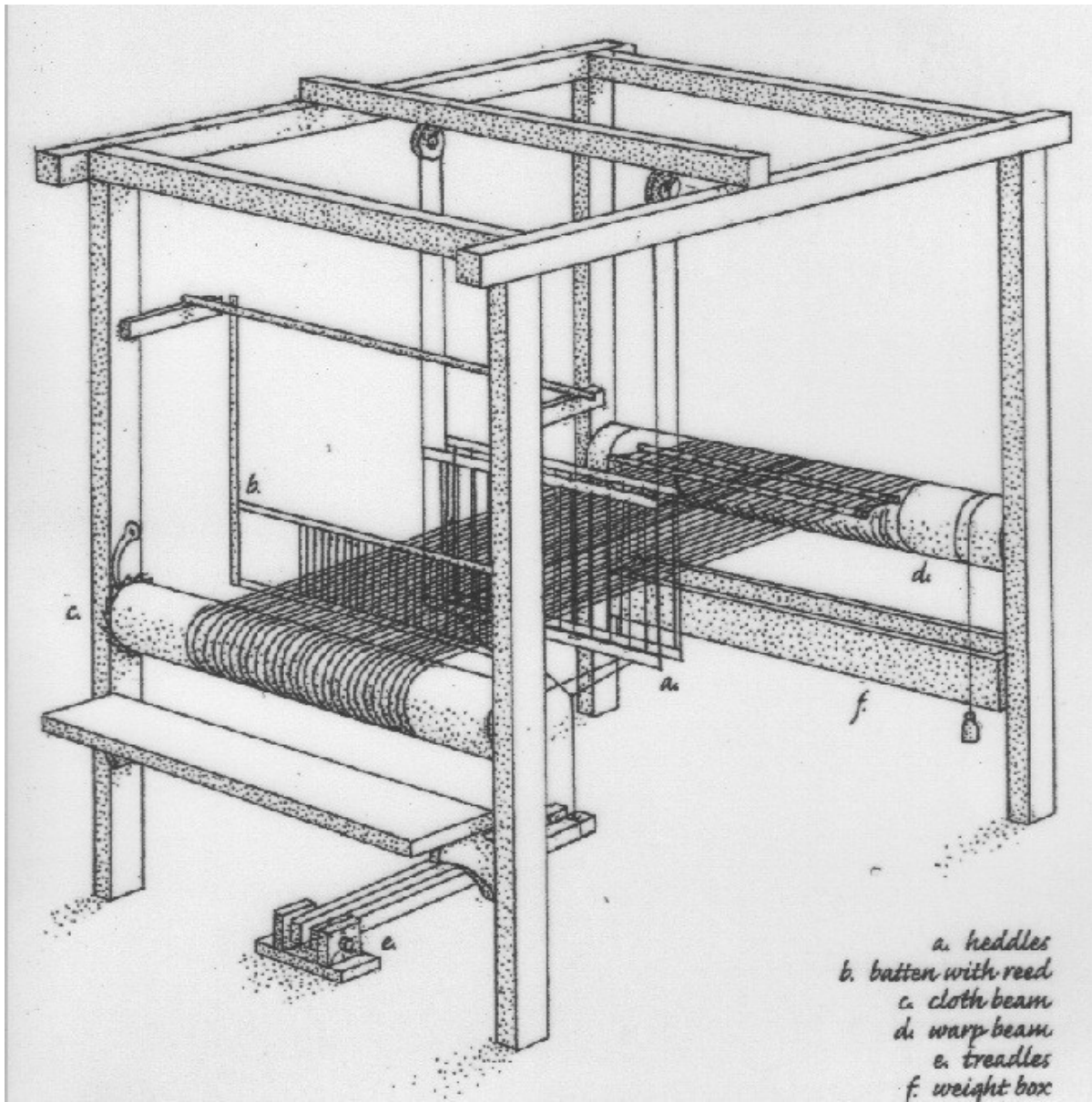
*Drop spinning in ancient times*

## ANCIENT LOOMS



*Warp Weighted Loom (often known as a Viking Loom) Image B Morgan*

*Traditional Floor Loom (image B Morgan)*



## STORYTELLING AND SONGS ABOUT TEXTILES

Examining such sources may be of interest and stimulate story retelling, interpretation or some form of art or musical work.

A few examples are listed below and many appear in illustrated form, often repeated with variations at different times.

### Rhymes

Little BoPeep – when lambs are hand raised they often follow their human foster parent.

Baa Baa Black Sheep – the burden of taxation is described in this rhyme.

### Songs

Spin, Spin

Poverty Knock

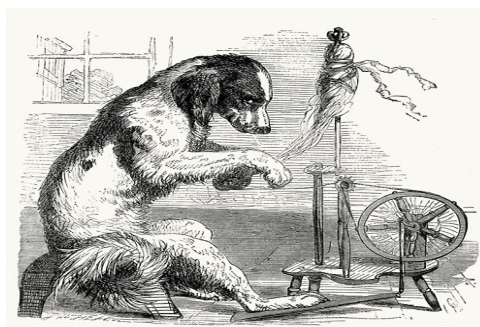
Lullaby of the Spinning Wheel

Wind the Bobbin

### Stories

Rumpelstiltskin – relates to how an apparently worthless starting material can be made valuable

*From Mother Goose's nursery rhymes, published by George Routledge and Sons, London, New York, 1877.*



Sleeping Beauty – all ladies were spinners, even princesses, and the heroine probably pricked her finger on the spindle of a Great Wheel.

The Three Old Spinners – Magic is interwoven with the effects of many years of spinning flax.

### Further Reading

*The Oxford Dictionary of Nursery Rhymes, Iona and Peter Opie, Oxford University Press, 1980*

*The Penguin Book of English Folk Songs, edited by RV Williams and AL Lloyd, 1959*

*Folk Tales of the British Isles, Edited by Kevin Crossley-Holland, Faber & Faber 1985*

*Scottish Folk Tales and Legends, Barbara Ker Wilson, Oxford University Press 1984*

## COMMON TERMS WITH TEXTILE REFERENCES

'Tie the Knot' – Getting married – relates to a Roman custom – marriage ceremony was completed when the groom untied the elaborate knot his bride had tied around her waist.

Spinster – a term applied to unmarried females because all females could spin before they got married. This skill was usually developed at an early age.

'The Black Sheep of the Family' – very often the majority of the flock is white, however, one black sheep was often kept. The reason for this being that black is a difficult colour to dye satisfactorily and permanently. Naturally occurring black wool was therefore a valuable asset.

'Shuttle Service' relates to the back and forth motion of the shuttle across the loom.

'On Tenterhooks' relates to the hooks used to keep cloth under tension while being woven.

## NAMES OF PEOPLE & PLACES

A trawl through a telephone directory can reveal many people whose surnames indicate that their families had a connection with wool and/or textiles. Some to look for are:

Shearer

Webb

Weaver

Webster

Fuller

Dyer

Blofield (flax, the plant from which linen is made, has a blue flower – thus 'blue field')

In Norfolk there are many other examples of place names, for example, "Weavers' Way", Weavers' Court, Tenterfield Place, etc.

Public House Names include The Woolpack, The Jolly Weavers, The Dyers Arms, The Golden Fleece and The Ram, amongst many others.



## ACTIVITIES

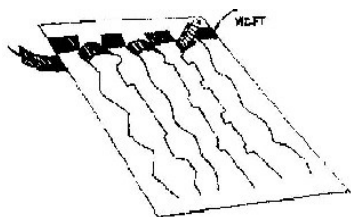
Demonstrations and practical introduction to a range of textile techniques can be given in the Norfolk area by members of the Worstead Guild of Weavers, Spinners and Dyers.

Various techniques will be introduced at each school as appropriate to the school's wishes, number of pupils, time and availability of Guild members.

Practical instructions for various examples of some of these weaving methods are given in this next section.

### PAPER WEAVE

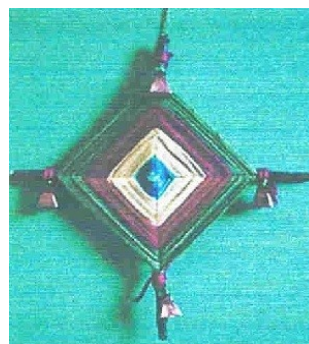
This is the simplest form of weave and does not require any special equipment. Experiment with different colour papers, magazine pages and even photographs.



Fold one sheet of paper in half horizontally. Draw a line about one inch from the open end of the folded paper. From the fold make a series of cuts up to the line. The paper is unfolded and laid flat, it now forms both loom and warp. Strips of paper can now be used as weft. The weft passes over one warp and under another. The next row passes under then over, and so on.

### GOD'S EYES

The Huichol Indians of Mexico and the Aymara Indians of Bolivia weave brightly coloured yarn on a simple frame of crossed sticks to make a design called "Ojo de Dios" or "Eyes of God". Originally, 'God's Eyes' were made to be placed on an altar so that the gods could watch over the praying people and protect them. The idea is now also used for decorative purposes such as wall hangings or Christmas tree decorations.



1. Lay the yarn over a stick from behind and across the next stick
2. wrap the yarn round the stick so that it lies alongside the previous wrap and comes up again from behind the stick.
3. Keep repeating this step, changing colour as you wish, until sufficient yarn has accumulated then tie off, making a suitable to suspend the finished item.
4. 3 sticks can be used or multiple linked designs can be made.

## PEG LOOMS



The peg loom is probably one of the simplest looms that can be used. It is true weaving because the warp and weft are interlaced at right angles.

### INSTRUCTIONS FOR USE

1. Decide what you want to make.
2. Choose suitable materials for warp (length) and weft (width). It is best to use strong cotton or wool yarn for the, but almost any materials warp - recycled textiles, plastic bags and yarn oddments make excellent weft materials.
3. Having decided how long a piece you wish to make double the length and add extra to allow for fringes or other forms of finishing. It is always better to have too long a warp than not enough.
4. Double the length of warp and add extra for fringe or other finish.
5. Pass a doubled end of warp through the hole in each peg and lift the end over the top of the peg then slide it down, pull on the strands of the warp and the warp will grip the peg.
6. When all the pegs are threaded you can begin to weave. Start somewhere in the middle, perhaps tie onto your weft with a small knot. It can be hidden later. Weave in and out of the pegs till you reach the end and then reverse direction. **Take care not to miss any pegs.**
7. When the pegs are about 2/3 full (you will probably find it easier to start with the 3<sup>rd</sup> or 4<sup>th</sup> peg in rather than the end peg) lift them **one at a time** and slide the weft down each peg onto the warp. Check that nothing will be trapped and replace the peg. **If more than 1 peg comes out make sure they are put back in the right order.**
8. When you have finished your weaving making a fringe is one way of finishing, there are others. Start with the free ends of the warp.
9. Take the 2 threads from 1 peg and tie it to 1 thread from the next pair. Take the remaining thread from the next peg and tie to the next two threads. Repeat till all the ends are tied.
10. Cut the warp where it goes through the peg and repeat the tying sequence.

## FINGER STICKS

A similar concept to peg loom weaving but the pegs are held in the hands, thus limiting the weaving width. A very portable form of weaving using 2,3,4 or 5 sticks.

### INSTRUCTIONS

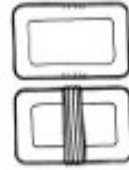
1. make a warp for each of the sticks by threading the yarn through the hole in finger stick so that half of the warp is on each side of the hole and the ends line up.
2. If a very thick warp is used it may be necessary to put a thinner yarn through the hole first and thread the thick warp through the loop.
3. Loosely tie all the free ends together leaving enough length for the fringe at both ends.
4. Hold the sticks in one hand, making sure they are spaced evenly. Lay the weft over the middle stick leaving about 5cm (2") hanging, then start weaving on the top third of the sticks.
5. The weaving process is the same as with the peg looms, going in and out and reversing directions after rounding the outside peg.
6. Keep plenty of weave on the sticks but gently push it down a little at a time onto the warp threads.
7. Weave until the knot is reached, cut the weft again, leaving a tail hanging, then untie the warp knot.
8. Push the weave down until there are equal lengths of fringe at both ends.
9. Tie a knot in the warp at both ends of the weave and hide the hanging tails in the weave using a crochet hook or similar.
10. Beads can be threaded onto the fringes, or alternatively the fringes can be worked back into the weave using a crochet hook.



*images courtesy craftsfromthecwtch.co.uk*

## CARDBOARD LOOM/TRAY LOOM

Having established the concept of warp and weft it is possible to make a very simple tapestry loom using either a cardboard box with small slits cut in the upper edges of the end walls, or an unused styrofoam food tray. The warp of a suitable yarn is laced between the slits in the box or wound round the tray.



The weft can be interlaced as with the paper weave, but the yarn can be carried using a shuttle to push the weft threads together. Once the weft reaches an edge it returns in the opposite direction, this time passing over the warp threads it had previously passed under.



Using this technique it is also possible to create tapestry pictures by using different coloured yarns as required. Tapestries are often developed from a picture, called a cartoon, held underneath the warp threads or placed alongside the weaving.



## INKLE WEAVING

Most inkle weaving is produced patterns by the arrangement of the warp threads and the result is a warp-faced weave. The weft plays no part in the finished pattern, unlike most other weaving. This loom has one set of warp threads held in position by heddles, whilst the other set can be raised or lowered by hand. The raising and lowering creates two different gaps (sheds) through which the shuttle can pass.

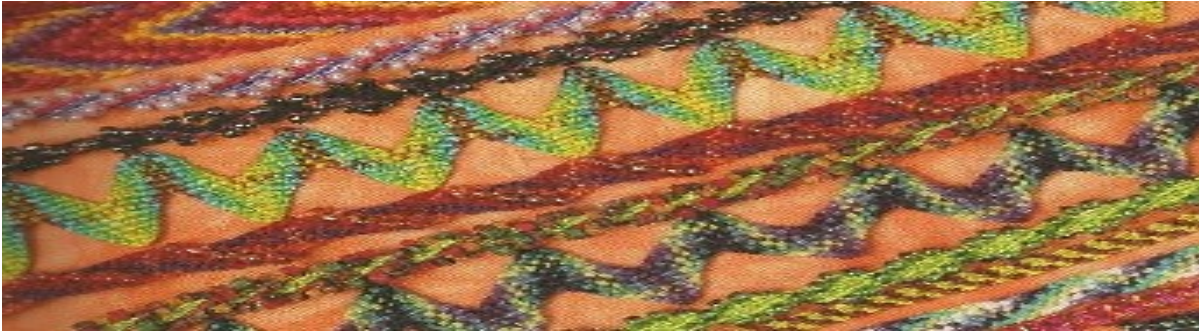


*weaving a pattern on an inkle loom*



*inkle loom image courtesy Ashford*

## BRAID MAKING



*a selection of braids image courtesy of Helen Deighan*

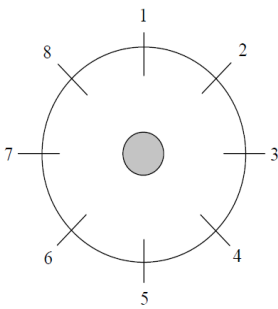


There is a Japanese braiding technique called Kumihimo that uses a Marudai. Yarn held in bobbins lead to a central counterweight. The braids produced can be beautiful and complex. The braids were used by Samurai warriors in the construction of their armour, giving strength and flexibility whilst holding the lamellar plates. Later this type of braid was also used on the Haori jacket and also for kimonos.

## FRIENDSHIP BRACELETS

It is also possible to make friendship bracelets, trainer laces or necklaces using a cardboard circle with a hole in the centre and a series of 8 slots around the perimeter. The slots allow the yarn to be moved from one to another and the central hole collects the yarns together, with the braid emerging from the underside of the card.

### INSTRUCTIONS



*image courtesy kumihimo.blogspot.uk*

1. cut a circle of card, approximately 15cm (6" ) in diameter with a hole in the centre and 8 evenly spaced slots around the edge
1. cut 7 lengths of brightly coloured cotton thread (any craft cotton is suitable)
2. tie the ends together leaving enough for a fringe if required and place through the hole; spread the 7 threads, 1 to a slot.
3. Starting from the empty slot, count to the third slot anti-clockwise and pick up the thread which is there and place it in the empty slot.
4. Repeat the process until the braid is the right length.
5. As the braid forms it is possible to hold the yarns and braid so that they are under slight tension.

## RESOURCE LIST

### MUSEUMS WITH TEXTILE INTEREST

#### **Norfolk Museum & Archaeology Service**

<http://www.museums.norfolk.gov.uk/>

Castle Museum

Bridewell Museum

Strangers' Hall

Shire Hall Costume & Textile Archive

Gressenhall Farm & Workhouse

#### **Dragon Hall, King St, Norwich**

A unique Grade 1 Medieval Trading Hall in Norwich

<http://www.dragonhall.org/>

### LEARN MORE ABOUT WEAVING, SPINNING & DYEING

#### **Worstead Guild of Weavers, Spinners & Dyers**

Weavers Workshops, Dilham NR28 9PS

<http://www.worsteadweavers.org.uk>

#### **Norwich Textiles**

discover the people, the art and the technology – then and now

<http://www.norwichtextiles.org.uk/>

### SUPPLIERS OF SPINNING & WEAVING EQUIPMENT & MATERIALS

#### **P&M WOOLCRAFT**

<http://www.pmwoolcraft.co.uk/>

#### **DYE SUPPLIES & EQUIPMENT**

<http://www.georgeweil.com/>

#### **TEXERE YARNS**

<http://www.texere-yarns.co.uk/>

#### **KUMIHIMO BRAIDING**

<http://www.crosswayspatch.co.uk/>

-

## **ACKNOWLEDGEMENTS**

WITH THANKS TO THE WORSTEAD GUILD  
MEMBERS AND VOLUNTEERS  
WHO GAVE OF THEIR TIME AND SHARED THEIR SKILLS  
SO ENTHUSIASTICALLY DURING THE HERITAGE LOTTERY FUND  
*SPINNING A YARN PROJECT*

THANKS TO WORSTEAD CP PRIMARY SCHOOL  
FOR COVER IMAGE

**1972 – 2012**  
**40 Years of Sharing Skills**



for more information visit  
[www.worsteadweavers.org.uk](http://www.worsteadweavers.org.uk)

## **COPYRIGHT**

THIS PUBLICATION REMAINS THE PROPERTY OF THE WORSTEAD GUILD OF WEAVERS, SPINNERS  
& DYERS AND IS INTENDED FOR EDUCATIONAL PURPOSES ONLY.

**NOT TO BE REPRODUCED**