

the Wheel

ASHFORD'S FIBRECRAFT MAGAZINE | NEW ZEALAND

ISSUE 35 | 2023/2024

THE BEST OF
THE WHEEL
SINCE 1987

aShford
WHEELS & LOOMS

spinning | weaving | carding | felting | knitting | dyeing

For more projects, patterns, and articles from us and the textile community please visit our blog www.ashford.co.nz/blog
We welcome submissions for the blog, please email us at info@ashford.co.nz

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*Cover: McLeod wears the Ashford
country hand spun jersey.
See page 32*

ashford
WHEELS & LOOMS

Editor's Letter

I hope you enjoy this hard copy issue of *The Wheel*. But as more and more of us worry about the environment we have made the difficult but, for us, correct decision to move to an online-only format. No more ink, paper, and freight. Our son James and his husband David together with our Marketing and Sales Manager Kate and her team, look forward to communicating with you online. Now you will have access to your craft content anytime and anywhere you have an internet connection.

Over 35 years I have loved working with you and sharing stories, ideas, and techniques that make the textile crafts so fabulous. Reaching out to and publishing stories from fibre artists around the world I hope has, in some small way, supported an international community sharing inspiration and the joy of handcrafting.

To prepare this "best of" last issue of *The Wheel*, I have had the delightful task of rereading all 34 issues and reproducing the patterns and projects that have been the most popular. Enjoy!!

Next year our company will be 90 years old, and we continue to experience huge demand for equipment, fibres and yarn that exceeds our ability to supply. We are grateful for your patience as we make our range of spinning wheels, weaving looms, and carders and supply them to you as soon as possible. While I have now retired – our grandsons, and my craft studio and vegetable garden call – Richard is busy in the workshop designing new products. See the new Traveller spinning wheel and the new Brooklyn loom on the Product News pages.

Before I sign off, I would like to thank our incredible creative team: our multi-talented Kate, our weaver, photographer and designer Tina, our proofers daughter Cathy, and Lynne, Christine and Diane, and models Noah and Flint (Tina's sons) and McLeod (Kate's daughter) who has featured in every issue of *The Wheel* since she was born in 2005.

And my special thanks to all the textile artists around the world who have so generously shared their patterns, projects, and experiences and who have conveyed to us their love of the craft.

And very special thanks to Richard for your love, encouragement and support – as always. I am so grateful.

Happy crafting, joy, and peace.

Elizabeth



Kate, Tina, and me



The Wheel on its way



*McLeod has featured
in every issue since
she was born in 2005*

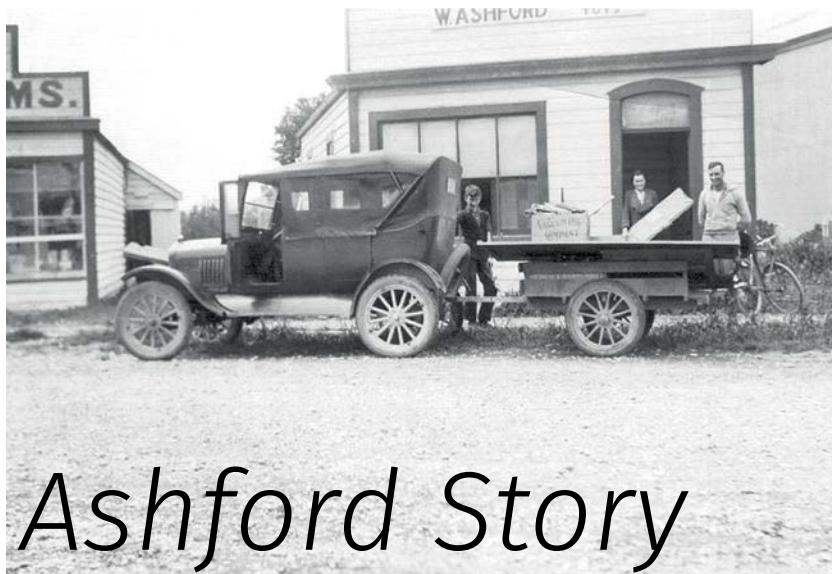


Next generation



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Ashford Story

First factory, 1934

From humble beginnings in the family washhouse, Ashford Handicrafts was founded on one man's passion for innovation and design. Today nearly ninety years later, Ashford is the world leader in textile craft equipment. With over 800,000 spinning wheels and weaving looms sold around the world, three generations, and Ashfords' dedication to quality and sustainability, their reputation within the international community of textile craftspeople, has never been stronger.

Our story begins in 1908 when English missionaries Reverend Dudley Ashford and his wife Beatrice moved from England to New Zealand. After 2 years they moved to Adelaide Australia where in 1914 Walter was born. They continued to move their growing family from parish to parish including St John's Newfoundland and Memphis Tennessee before returning to England.

At school Walter excelled in his wood and metalwork classes. After he left school, he immigrated to New Zealand in 1929 at the tender age of 15 with a dream of becoming a sheep farmer. But as New Zealand succumbed to the clutches of the Great Depression, Walter lost his job. His family, concerned for his future, followed him to settle in Christchurch, bringing with them woodworking tools that would set him on his unique journey.

In 1934 Walter began making wooden fireside stools in his parents' washhouse and his sister Mary helped weave the seagrass seats. He took to the streets of Christchurch on his bicycle, selling door-to-door, learning first-hand that quality and value resulted in orders.

Soon after, Walter's father answered the call to minister to the people of Rakaia, a small town not far south of Christchurch. Freed from the confines of the washhouse, Walter set up a small factory making stools, furniture, and farm gates. Walter quickly built a reputation for good workmanship at affordable prices.



Walter and his handmade drill press

Buoyed by local success, Walter took his range to the national market, advertising in national magazines and newspapers. He began packing the parts with easy-to-follow instructions as a kitset and the slogan "Assemble and Save" was born.

As Ashford kitsets grew in popularity, Walter needed to increase production to meet the nationwide demand. He was an intensely practical man with a remarkable talent for design and so made his own machines. With this new capacity, Walter expanded the range to include nursery furniture and wooden toys. He was thrilled when the Farmers Trading Co in Auckland ordered 4,000 sailing boats and £500 worth of scooters and cricket sets.

Then in 1939 everything changed when the world went to war. The huge demand for woollen socks, gloves, scarves, and balaclavas to send to the troops overseas and a shortage of commercial knitting yarn created an urgent demand for hand spun yarns. In 1940 the New Zealand Home Journal approached Walter to design a robust easy-to-use kitset spinning wheel for their readers. He didn't know much about spinning, but the challenge of combining his skills in woodworking and making machines proved irresistible. After some trial and error, and with help from his father who had himself taken up spinning, Walter produced his first wheel. It was a double-drive model but shortly after they invented and patented a Scotch Tension flyer.

In 1941 Walter joined the air force and became a pilot officer eventually working in the cypher division. While training he met a very charming nurse by the name of Joy Rendall, and they kept in touch while he served in the Pacific. He left his father in charge of the factory and the team of women made over 3,600 spinning wheels.

When the war ended, Walter returned home and married his sweetheart, Joy. However, he found the demand for his spinning

wheels had died overnight. The people of New Zealand were weary of spinning, and wool was being displaced by the new magic fibre, nylon.

Fortunately, the post war baby boom created a huge demand for nursery furniture, so Walter concentrated on making baby cots, highchairs, play pens and rocking horses. Before long Gay, Heather and Richard arrived to test his new designs.

In 1965 a spinning enthusiast Pamela Wilcox visited the factory and asked Walter to make her a spinning wheel. Pamela followed the country's top shearers on their tour of Agricultural and Pastoral shows, spinning the freshly shorn fleeces. While Walter was hesitant, having been left with a storeroom of unsold wheels at the end of the war, Pamela was persistent and passionate about promoting the benefits of wool. With a firm order of ten wheels, Walter returned to his workshop and developed the Ashford Traditional. Spinning groups were forming all over the country, and Walter continued to improve his design and manufacturing methods. The renaissance of hand spinning bloomed and soon orders were flowing in from Australia, America, and Europe.

With his success producing spinning wheels, Walter began to make weaving looms and Joy held spinning and weaving workshops and demonstrations around New Zealand.

As the business grew, so did the need for bigger premises. Following a fire in the Rakaia factory in 1958, Walter rebuilt the factory, and purchased a building site in Ashburton just 20 minutes south where he built a second factory, showroom, and shop.

Fresh out of Polytech, Walter's son Richard joined the company in 1972, starting on the factory floor, learning from his father. With future expansion on the horizon, Walter and Richard purchased five acres adjacent to the Ashburton factory. This included Mill House which was subsequently converted into their showroom, shop, and café and the Ashford Craft Village was established. As demand for spinning wheels continued to soar the factory was doubled in size and the Rakaia team bussed to Ashburton.

Richard married Elizabeth Genet in 1981 and, with her legal background, was welcomed into the family business. Six years later, she debuted *The Wheel* magazine. Reaching out to and publishing stories from fibre artists around the world, she hoped the magazine would help support the international community who share the inspiration and the joy of handcrafts.

Richard followed in his parents' footsteps, travelling around the world meeting customers and discovering new markets thirsty for handcraft equipment. From Asia, Europe, and the Americas the feedback rolled in, and Ashfords' range expanded. Carders, fibres, dyes, and yarns joined the growing catalogue of wheels and looms. Innovation and technology combined to add portability and accessibility, with folding wheels and looms and electronic spinners and carders.

Education and inspiration have always been an essential part of the business. International experts in their chosen craft were welcomed as authors of Ashfords' ever-expanding library of books.

The Ashford team has taught at spinning and weaving retreats and exhibited at craft conventions on all continents except Antarctica! The Ashford booth is always busy with friends and



Richard tests the Ashford rocking horse, 1954



Richard checks the new wheel, the Traditional, 1970



The Mill House is converted into a craft centre, 1976



Elizabeth with the first issue of The Wheel, 1987



Richard and the first Traveller, 1977



The next generation, James, and the Traveller 3, 2023

customers, learning, chatting, and getting their equipment signed!

To secure their supply of quality wool fibre, in 2011 Richard and Elizabeth purchased part of the historic Milton Woollen Mill. Not only could Ashfords now have direct control over producing the finest ethically-grown New Zealand sliver, the unique skills of the staff were preserved.

Niche manufacturing skills are also of the utmost importance in the Ashburton factory. Many staff have completed woodworking apprenticeships, with some having been part of the Ashford family for over 40 years!

In 2015 Richard and Elizabeth's son James and his husband David Lester joined the business. With passion and enthusiasm and degrees in computer science and accountancy respectively, they have subsequently taken over the operation and ownership of the business. Richard continues to innovate and develop current and new products while Elizabeth continues her mentoring and philanthropy roles.

Eager to give back to the international textile community, Elizabeth and Richard set up the Ashford Textile Award in 2019. Every year, worthwhile causes from around the world are nominated, with the winner receiving \$5000 worth of Ashford equipment. From refugees in Istanbul to disabled young adults in Indiana, there are many disadvantaged and marginalised people whose lives have been enhanced because of this award.



Handspun Hope in Rwanda, received the Ashford Award in 2020

There is constant investment in new machinery to make the factory a safe and more enjoyable place to work.

The most recent addition is a small robot stapler which has eliminated the potential for RSI when assembling rigid heddle reeds and hand cards. It's a far cry from the Rakaia days of using a red-hot fireside poker to straighten the holes in bobbin centres!

At its heart, Ashfords is a family business and everyone, from staff to distributors, dealers, and customers, is part of that family. Today it is in the safe hands of the third generation, the company that started life in the family washhouse remains dedicated to inspiring and enabling textile artists around the world.



Richard and Elizabeth Ashford, Hugo Lester-Ashford, David Lester and James Ashford

Needle Felted Owl

BY KERRIN FORSTER, ASHBURTON, NEW ZEALAND



I love needle felting – it's quick, easy, portable, and affordable! And you can make adorable creatures such as this owl. Once you have mastered the techniques you are limited only by your imagination.

You will need:

Ashford Corriedale sliver 15gms (½oz) White; 4gms (¼oz) Beansprout; 1gm (⅙oz) Natural medium; ½gm (⅓oz) Liquorice
Felting needle 36 gauge
Needle felting foam

flatness. To make the white dots on the wings, take very small pieces of white roughly the same size and roll each into a small ball and lightly felt directly onto the wing. Once finished set aside for the moment.



Here's how:

Body and head

1. Keep aside about 1/10th (1½gms) of white. Roll the remainder of the white into a cylinder and needle felt to form a firm, squat cylinder with a rounded top.



4. Blend the rest of the beansprout together with the natural medium, by gently pulling the fibres apart and placing on top of one another, repeating until blended.
5. Wrap this fibre around the body of the owl and needle felt into place.



2. A third of the way down from the top, needle felt across half of the shape to define the front of the face. Continue needle felting the rest of the head and body into shape (leave the back curved). The body/head of the owl needs to feel firm when gently squeezed.
3. Keep aside about ¼ (1gm) of beansprout (for the wings). Of the remaining ¾, set aside a small amount for the eye area (about ½gm), then split into two equal parts. Take one part and start to wrap and needle felt the fibre around the head.

Face

7. Make the eye and brow with the remaining white, split into three equal parts. Set aside one part: with the other two parts set aside ¼ for the brow wing tips. Make two circles by wrapping each remaining piece around your thumb and slide off. Needle felt it on and off your thumb to ensure the circular shape is formed well. Continue to needle felt into shape. Once you have formed two circles needle felt together by overlapping one circle slightly on top of the other.



Wings

6. Split the remaining beansprout into two equal parts. Roll into an oval and needle felt into a wing shape. Keep turning over and felting each side until you get the desired shape and

8. To make the brow wing tips - fold up each of the ¼ left from making the eye and brow into a small piece, needle felt into place creating a triangular shape. With the remaining white sliver (the one part set aside

Needle Felted Owl continues...

from step 7), go over the entire shape and needle felt stray ends in. Once satisfied with the shape, place on the face front and needle felt into position.

9. If you find there are any white ends that are exposed on the actual eye area you can needle felt a small ball of beansprout to cover these.
10. To make the asleep eyes roll small pieces of the black between your fingers. Needle felt these into place running from the bottom inside of the eye curving upwards into the corner.



11. To make the nose roll a small piece of black into an oval ball and needle felt into place at the base of the centre of the eyes. Needle felt into a diamond shape.
12. Now the wings can be needle felted into position. Slightly angle the wings towards the back and needle felt half of the wing onto the body.



Editor's note

Using natural fibre and a little barbed needle you can capture the beauty and 3D realism of nature and wildlife. Kerrin, our Office Manager, has made a very endearing fellow. Enjoy!

Log Cabin Runner on the *Rigid Heddle Loom*

BY DELAND LIAO, TAIPEI, TAIWAN



Alternating light and dark yarns in both the warp and weft create a smart two block pattern.

I like the rigid heddle loom because it is so easy to warp, and you can see the width and the length you need. (Not forgetting, of course, an allowance for loom waste and take up.)

Log cabin is a colour and weave technique; the pattern looks complicated, but it is not!

It is just a two shaft plain weave that produces areas of smart vertical and horizontal pinstripes.

This table runner is a project in my rigid heddle weaving class. Students choose their own colour cotton, and they all look beautiful.

You will need:

Loom: 40cm (16ins) or wider rigid heddle

Reed: 50/10cm (12.5dpi)

Warp and weft yarn: 3/2 Mercerised

Cotton 2,442m/kg (1,260 yds/lbs) 65gm (2¼ozs) Green; 49gm (1¾ozs) Natural

Here's how:

Total warp ends: 144

Total warp length: 115cm (45½ins)

Finished length: 76cm (30ins)

Finished width: 27cm (10½ins)

Warping

1. a. Tie the green on the back warp stick and pull it through the slot to the warp peg (2 green ends).
b. Tie the natural on the back warp stick and pull through the slot (2 natural ends).

Repeat a and b until you have double ends of 5 green and 4 natural (18 ends as a group).

2. Tie the group in a choke with a contrasting colour.
3. Repeat until you have 8 groups of yarns (double ends of 5 green + 4 natural), a total of 144 ends.
4. Wind on and start threading the first group of 18 yarns.
 - a. Remove from the slots (where necessary) and thread the first 5 eyes with green and the first 4 slots with natural.
 - b. Thread the next 4 eyes with natural and 5 slots with green.
 - c. Repeat for rest of the warp.



Tie the green and then the natural to the back warp stick



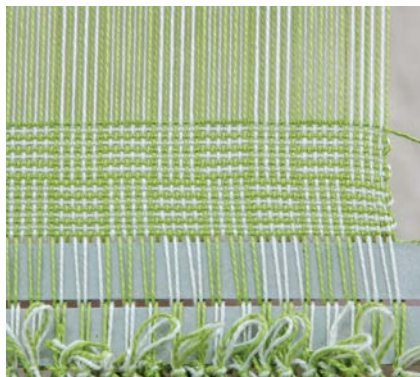
Choke each group



Thread the loom so when green is on top, natural is on the bottom (and vice versa)

Weaving

1. Weave one pick of green. The second pick is in natural. Alternate until you have woven a block of 5 green and 4 natural.
2. Start the second block with green again, then natural until you have woven a block of 5 green and 4 natural.
3. Repeat until the end.



Smart pinstripes

Finishing

Remove the fabric from the loom. Hem-stitch the ends. Wash in warm soapy water and rinse. Lie flat until almost dry, and then press with a steam iron.

Now you have a table runner or use the fabric to make a purse, pillow or handbag. Have fun!

Editor's note

Deland started her business, Founder Tek, in 1994, and became an Ashford dealer soon after. After 20 years the company became a family business with daughter Genie and son Mulder working alongside.

They supply equipment and offer beginner through to advanced felting, spinning and weaving classes with students coming from throughout Taiwan and also Hong Kong, Macao, and China. Deland's log cabin runner first featured in issue 26 of *The Wheel*.



Finish with hemstitching

Big Blanket *Little Loom*

BY KATE SHERRATT, ASHBURTON, NEW ZEALAND

Weave a beautiful, soft, and cosy blanket, big enough for the bed or just snuggling up on the couch. The blanket has invisible joins, knotless fringes, and a beautiful, brushed finish.

The blanket is woven in 4 panels then sewn together and finished.

You will need:

Loom: 40cm (16ins) or wider rigid heddle
- This blanket was woven on a 40cm (16ins) Samplelt loom

Reed: 30/10cm (7.5dpi)

Warp and weft yarn: Ashford Triple Knit 100% wool (150m/100gm) 3 balls of each colour 808 (MC1), 809 (MC2), 806 (MC3), 813 (MC4) and one ball of contrast colour 804 (CC)

Other: Scrap yarn to spread the warp, Fringe Twister, darning/wool needle, stiff bristled brush – a scrubbing brush is ideal

Here's how:

Total warp length for each panel: 2.3m (90ins)

Total warp ends for each panel: 120

Finished size: 155 x 165cm (61 x 65ins) not including fringe

Warping

You will warp the loom four times, once for each panel. Each panel will use a different main colour. Warp 2 slots of contrast colour, 56 slots main colour, 2 slots of contrast colour. Ensure you start from the very outside slot. Leash on to save wasting warp length and make even tensioning a breeze. Use the scrap yarn to spread the warp. Remember to leave a tail of weft yarn three times the width of the warp so you can hemstitch after you have woven a few rows.



Editor's note

This pattern has been so popular because it is quick and easy, and makes a really lovely blanket. I know of many weavers who have made multiple blankets for themselves and as gifts.

Weaving

The weaving sequence will be the same for each panel, so that the colours match up across the width of the blanket. Weave 4 picks of CC, 96 picks of MC1, 8 picks of CC, 96 picks of MC2, 8 picks of CC, 96 picks of MC3, 8 picks of CC, 96 picks of MC4 finishing with 4 picks of CC. Weave 6 or 7cm (2-3ins) then remove the scrap yarn and hemstitch. Hemstitch at the beginning and end of each of the panels. For detailed instructions see www.ashford.co.nz/blanket

Hints

When weaving panels with stripes that need to match, I prefer to count the picks rather than measure the length of weaving. For easy counting I insert a piece of contrast cotton in after each 20 picks. If you get interrupted, you can see where you are up to, and they can be easily removed at the end.

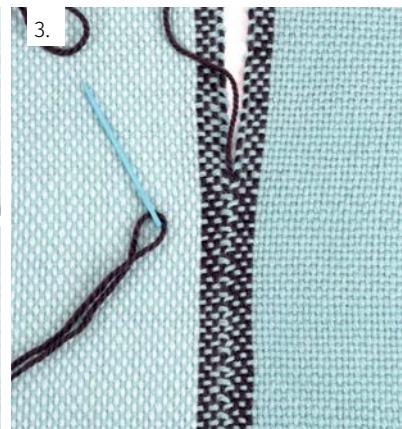
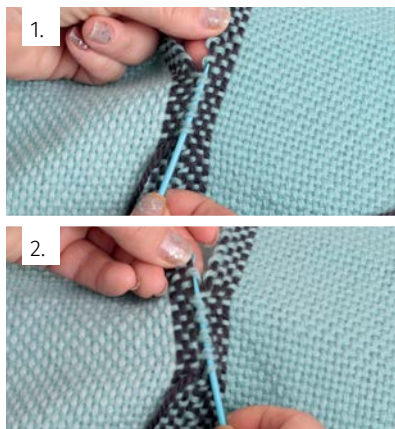
To get perfect edges take the shuttle through the shed and hold the yarn on the edge between your finger and thumb in line with the slot the outside warp thread is in. Pull the other end taut upwards on an angle. Release the thread, and then release the pinched edge. By pinching the yarn and holding it in line with the outside thread you will prevent any draw in. Make sure you let go of the end upwards on an angle BEFORE you let go of the pinch.

Assembling

Once you have all four panels woven you need to join them. The most seamless join to use is the "entrabe union" method. This is simple and produces a seamless finish that is almost invisible.

Take a length of the contrast colour yarn longer than the length of the panel. Start by going through the end of the fabric and securing the tail with a knot. With the two panels lying flat next to each other (making sure you have the panels up the right way before you start so your colour sequence is correct) take the needle through the first weft loop on one panel then the first weft loop on the other panel. Continue picking up each loop alternating side to side. When you get to the end secure with a knot. Ensure you smooth the joined fabric out, so you do not get any bunching up along the join.

Once the panels are joined twist the ends and knot to make the fringes.



Joining the panels



Brush both sides



A short flicking motion works well

Finishing

Soak the blanket in hot water (with no agitation at all) for one hour. To ensure your fringe is secure when you cut off the knots you can semi-felt them a little. Take 2-3 of the fringes and wipe with a cake of soap then rub them back and forth between your palms. Once you have semi-felted the fringes wash the blanket in a machine on a gentle wool wash. Check the results if the weave is still too open wash a second time. You do not want it to completely felt – just nice and full.

While it is still damp lay on a flat surface and beat the wrinkles out with your hand opened flat. Allow to dry flat. Once dry, trim the knots off the fringes. Using a ruler and a rotary cutter works best.

Now your blanket is ready to be brushed. Use a scrubbing brush or other stiff bristled brush to brush the entire surface on both sides. I find using a short flicking motion works the best.



Margaret Stove

“A Living Treasure”

BY ELIZABETH ASHFORD,
ASHBURTON, NEW ZEALAND

Margaret who was once described, at the launch of one of her books, as a “living treasure”, is that special craftsperson who has shared her passion and skill throughout her life. An acclaimed fine wool spinner and knitter, Margaret through her books, workshops and work has given others the confidence to try and the ability to succeed.

The solitude and isolation of a small alpine village in the Southern Alps of New Zealand where her husband was the schoolteacher, and a gift of an Ashford wheel and fleece, were the catalyst for a remarkable career in the woollen crafts.

Taught to knit by her grandmother when only four, Margaret has always been a proficient knitter. Living in the mountainous Arthur's Pass plenty of woollen garments were essential. Commercial knitting yarn, however, was very expensive, so spinning her own made sense.

“But in the middle of all those thick, chunky socks and jerseys I decided to try and spin wool for something fine like a christening shawl. I purchased a Merino fleece from a high-country farmer and started.” The rest, as they say, is history. Margaret has an international reputation with work widely exhibited in New Zealand, Australia, Japan, UK, and USA. Her wedding ring shawls (a shawl so fine it can pass through a wedding ring) have been presented to the infant Prince William, the Duchess of Kent, and Lady Blundell.

Of all of Margaret's works the shawl for Prince William is her most famous. In 1982 Margaret devoted more than 400 hours of designing, spinning, and knitting the shawl for the infant son of the Prince and Princess of Wales. Influenced by the Shetland tradition of creating lace elements to reflect the local environment, the shawl included motifs inspired by native NZ flowers and a border of a stylised Kowhaiwhai pattern. Taking her skills and knowledge to a higher level showed that craft could also become art as a unique piece of design.

When Prince William became a father himself, Margaret designed the shawl (Filmy Fern from her book *Wrapped in Lace*) that was given to the royal baby as NZ's official gift.

What sets Margaret apart is that she regularly designs the actual lace motif itself within her knitting. Starting with sketches she experiments with stitch combinations until the motif represents her initial concept. The inspiration for traditional knitted lace patterns that have been passed down through the generations in Europe was the local environment whether it be shells, flowers, or the flowing of the tides. In utilising her design skills to expand that foundation to include lace patterns unique to New Zealand she has contributed to our craft maturity as a country, integrating our heritage with who we are as a Pacific people.



Margaret holds the Bush Bouquet Shawl she created for Prince William, 1982

Over the years she has developed an incredible level of expertise in the history of hand knitted lace textiles in New Zealand and internationally. A number of her articles have focused on re-creating or restoring heritage patterns.

Many have been fortunate to know and learn from her during her presidency of the NZ Spinning, Weaving and Woolcrafts Society, and her many workshops both in New Zealand and overseas.

Her books *Working with Merino and Superfine Wools*, *Creating Original Hand-knitted Lace* and *Wrapped in Lace* are popular with beginners and experts, with reviewers describing the books as classics that will be treasured by generations.

Her contribution to the international knitting community was recognised with the award in 2014 of a Queen's Service Medal (QSM).





Some of Margaret's recent work

Margaret lives in the port town of Lyttelton, Christchurch, where she continues to design knitting patterns. Her granddaughter's store, Holland Road Yarn Company, carries on the family tradition and stocks Margaret's Artisan New Zealand Merino yarns. Thank you, Margaret, for sharing.



Margaret receives a QSM from the Governor General Sir Jerry Mateparae, 2014

"My own enjoyment of spinning and knitting has been greatly enhanced by the opportunity to share it through teaching and writing.

I always know my classes will be easier to teach when I see students arriving with their Ashford spinning wheels as their operation is so easy to understand thus giving students complete control over the minor adjustments required to spin a wide range of yarns.

The yarn for my first ring shawl was spun on my Traditional with the original 7:1 ratio. The new flyers allow me to spin superfine yarn with even greater ease and the minimum of effort."

Editor's note

Margaret featured on the front page of the first issue of *The Wheel* in 1987. The previous year, 1986, she had represented NZ at the Commonwealth Arts Festival run in conjunction with the Commonwealth Games in Edinburgh, Scotland. The theme of the festival was the development of traditional Scottish crafts within the Commonwealth. Margaret's hand spun and knitted lace shawls met the traditional Shetland test of being passed through a wedding ring.

Margaret sees herself as largely retired but she is still knitting and designing. Visit www.margaretstove.nz a site managed by Margaret's daughter and granddaughter, to see a portfolio of the many works developed over Margaret's long career as a craft artist, her latest designs and links to her patterns and books.



Fine Lace Scarf

By Margaret Stove

Spin a semi-worsted fine two ply yarn. This lace scarf is knitted in an adaptation of a Spanish leaf pattern. Two balls each approximately 150m (165yds) lace weight yarn (original tex 74/2). Needles size 3.75mm (US5, UK9). This scarf is knitted in two pieces from the ends to centre where the two pieces are grafted together.

Cast on 65 stitches loosely and knit 3 rows.

Pattern:

Rows 1 - 6 inclusive. K3, * Yo, K3, P3tog, K3, Yo, K1. Repeat from * to last two stitches. K2.

Rows 7 - 12 inclusive. K2, P2tog, * K3, Yo, K1, Yo, K3, P3tog. Repeat from * to last 11 stitches. K3, Yo, K1, Yo, K3, P2tog, K2. Repeat these 12 rows until yarn supply is exhausted and ending with row 3.

Leave on a spare needle. Repeat with second ball of yarn. Graft the stitches from each piece together. Wash and block with sufficient tension to open the lace areas.

Joy's Guide to Teaching the Craft of Spinning

BY THE LATE JOY ASHFORD, ASHBURTON, NEW ZEALAND

Passing on the craft of spinning can be as satisfying as spinning itself. Joy Ashford, partner and wife of Walter, company founder, loved to teach and during her life taught many the joys of spinning. These are her teaching plans.



Elizabeth and Joy, with the Joy Spinning Wheels, designed by Richard for his mother, 1995



"Spinning is such a useful craft," said Queen Elizabeth to Joy



Joy, far right, with one of her spinning groups

Lesson 1

I love meeting a class for the first time. Six to eight students is a good size to manage. At first we are all strangers, but after only four lessons, we bond, as we share in the pleasure of our new-found craft. Each student gives their name and says a little about their hopes and expectations from the class. As a tutor, I try not to talk too much. Questions and answers are the best way of learning. It's a hands-on experience all the way. We could spend a lot of time discussing the origins of spinning and the characteristics of wool. But these things will reveal themselves as the need arises.

Sit comfortably at your wheel, (you'll name and learn the function of the various parts as you spin). See the leader thread tied firmly to the bobbin (a bonus from your tutor). It emerges through the hole in the shaft and out through the orifice. Lay pieces of fleece wool along the leader and treadle the wheel clockwise. See the fleece wool attach itself to the leader, and hey presto! As it twists and turns and pulls onto the bobbin you are spinning a yarn. It could be lumpy, bumpy, or skinny, but keep going and you will get better with practise. The feel and rhythm will come to you in time. By the end of the first lesson the students should know the basics of spinning a yarn, and should have filled one bobbin. For homework I ask them to fill another bobbin.

Lesson 2

With a little help the filled bobbins are placed on the lazy kate, and the end from each is tied to the leader thread. The students then begin treadling in an anti-clockwise direction. It is very experimental at this stage, as they begin to feel how many twists are needed to bond the yarn together without overspinning. The place sounds like a music room as everyone counts aloud, making sure they feed the same amount of yarn on each down treadle.

Try plying black and white together. This makes it easier to

see how the twists are lying. After the bobbin is filled, it's time to seek help from the niddy noddy. I show the students how to loosen the tension and wind the yarn in a figure of eight. They then remove the skein from the niddy noddy. The skein should have a little extra twist but, after washing, the skein will relax and be perfectly balanced. The niddy noddy allows an accurate calculation of the yarn length.

We then wash the skein in warm water with washing liquid. Finally, rinsed in clean water, the skein is hung out to dry. For homework I ask them to knit a quick cap. Cast on around 76 stitches and knit a cap in rib (2 plain, 2 purl), until it is long enough to fit around the head, then tie a top knot with a cord, and sew up the side seams. (See the full pattern below.)

Lesson 3

What a buzz – what excitement! Everyone has a knitted cap, and they all look different. Sizes vary a lot. Despite protests and modesty, there is a smile of achievement on every face. In this lesson, we focus on different ways to prepare fleece wool. We go through the processes of combing, flick carding, and using hand cards. Make sure people don't stab their fingers by mistake, as hand card teeth can be sharp.

Next we turn our attention to the drum carder, which blends fibres and mixes colours to perfection.

A quick way to tell the size of the yarn is to wind a length of it around a knitting needle. Wrap it smoothly and evenly around without overcrowding. Generally speaking, 20 wraps per inch (2.5cm) is a fine yarn, 12-20 wraps per inch is a medium yarn and 12 or less wraps is classed as a bulky yarn.

Just for fun we try spinning on each other's wheels. An

interesting experience. For homework I ask them to create a small skein, each of fine, medium, and bulky yarn.

Lesson 4

This is our last day together as a class. We start by examining our skeins of yarn, and comparing them with others. All are very individual, but basically within the margins of bulky, medium, and fine. When knitting the yarn, always knit a four inch (10cm) square, and adjust patterns to suit your needles. It is better to do this now, than to have to unravel half of the sweater because it did not fit.

In this lesson we talk a lot about wheel maintenance, oiling all moving parts, and adjusting tensions. I slacken all the belts and knobs, and allow the spinners to adjust them for best results. This is a good way to learn.

Many of the students exchange phone numbers and addresses, so they can keep in touch and discuss their progress.

I encourage them to really enjoy their spinning and be as creative as their imaginations will allow. Nothing is right and nothing is wrong. It frees you and gives you self-confidence with lots of opportunities to be really creative. Share your craft with others – they'll love you for it. Join a club, if possible, it's fun and will keep you stimulated. At the end of the fourth lesson, I give out an Endeavour Certificate. I love my beginners' classes, and later when they win prizes, I'm so proud of them. Perhaps I shall see them at an intermediate class next time.

Editor's note

Joy loved to spin and loved teaching others how to spin. These course notes first appeared in Issue 15 of *The Wheel* in 2004.

First Creation Ribbed Cap

Don't toss out your first skein of hand spun, Joy would counsel her students. Knit a ribbed cap and be proud! Here is her "First Creation" pattern.

Cast on 76 stitches and rib (k2, p2) for 25cm (10ins)

Next row: k2, p2 tog, to end

Next row: k1, p2, to end

Next row: k2 tog, p1, to end

Next row: k1, p1, to end

Next row: k2 tog to end

Next row: p3 tog to end

Slip thread through remaining stitches and draw up.

Stitch seam and add pompom.

Joy's first creation hat



Four needle *fleece-stuffed* *mittens*

BY ANITA L. HART OF STARK,
NH, USA

These traditional mittens are super warm, fun to knit, and the wool lining creates a beautiful “heart shaped” stitch on the outside.



Since the early 1800s New England and Canadian women have been knitting “fleece-stuffed mittens” for their families.

The bits of fleece covering the inside are thick and woolly and mat into fur-like lining with wear.

Fleece-stuffed mittens are beautiful mittens. Traditionally they were knitted in a greasy light or dark hand spun yarn with contrasting fleece colour. When knitted in dark yarn with light fleece they look like large snowflakes in the night.

The wool mitten will shed water, and even when it gets wet, will still be warm. After all, the wool has kept our sheep warm through the tough northern winter already.

Stuffed mittens are not hard to make. If you can knit and purl, you can make stuffed mittens by following my simple instructions.

You will need:

100gm (3-4ozs) worsted weight, natural oily wool yarn.

50gm (1½ozs) roving or natural carded fleece in a contrasting colour.

Needles: One set of 3.5mm and 4mm (US4 and 6; UK10 and 8) double pointed needles or size needed to obtain correct gauge of 9 stitches = 5cm (2ins).

Here's how:

Sizes: 3-6 years (8yrs to teen, adult med, adult large).

Pattern: A multiple of four stitches and four rounds. A bit of fleece is knitted into the fabric along with the yarn every fourth stitch of every fourth round.

Row

1

$$2 + 3$$

4

To prepare the fleece:

Take a piece of roving or carded fleece about 7.5cm (3ins) long and 0.5cm (¼in) wide, very thin and light. Roll it slightly between your palms to shape it, then give it a couple of twists in the middle where you will insert it into your fabric.

To knit in the fleece:

Insert needle in the next stitch to knit, wrap the yarn as usual, then lay the twisted bit of fleece over the yarn with the ends inside, then knit both the fleece and the yarn as the same stitch.

Cuff:

On 3.5mm (US4; UK10) double pointed needles, cast on 30 (34, 38, 42) stitches, divide on three needles and join. Knit one, purl one rib for 7.5cm (3ins) in the last row increase six stitches evenly 36 (40, 44, 48) stitches.

Change to 4mm (US6; UK8) needles and knit one round. Insert fleece into the next round and follow the fleece pattern from there on. Be sure the fleece is covering every square inch of the inside, especially the tips of the fingers and thumb.

Thumb gusset:

At the beginning of the second round, increase one stitch in the first stitch, knit one, increase one stitch in next stitch, (for

thumb gusset) place a marker on needle, knit around.

Increase one stitch on both sides of the thumb gusset every fourth round 4 (5, 6, 7) times total. There will be 11 (13, 15, 17) stitches in the thumb gusset: put them on a string.

Hand:

Cast on three stitches to bridge the gap and knit straight up (don't forget to add fleece) until mitten measures 20 (23, 26.5, 28cm) 8 (9, 10½, 11ins) or desired length.

Top shaping:

Row 1: Knit two, knit two together, repeat to end

Row 2 and 4: Knit around

Row 3: Knit one, knit two together, repeat to end

Row 5: Knit two together, repeat to end
Cut yarn leaving a tail, draw through remaining stitches, pull up tightly and fasten inside.

Thumb:

Pick up from string 11 (13, 15, 17) stitches, one stitch from each side of hole, and three stitches from top of hole.

Total 16 (18, 20, 22) stitches. Knit straight up, adding fleece as per pattern 4cm (5, 6, 7.5cm) 1½ (2, 2½, 3ins) or desired length.

Next row: Knit two together around.

Finish as top of hand. Now turn mitten inside out and using your fingers pick at each fleece, fluffing and spreading to cover the inside evenly.



Roving knitted into the inside of the gloves

Editor's note

Anita wrote that she hoped you will enjoy the mittens as her family did. Anita's pattern featured in Issue 7, 1993.

Failsafe Fleece Washing Technique

BY BARB PEEL AND MARILYN BUTLER,
ROXBURGH, NEW ZEALAND

Try this fleece-washing technique from Tallyho.

You will need:

- 1 greasy fleece skirted
- ½ litre (1pt) non-scented dishwashing detergent
- ½ cup washing soda
- Container large enough to hold the whole fleece
- Container with drainage holes large enough to hold the whole fleece
- Washing machine
- Drying rack

Here's how:

Fill container with hot water, 80°C (176°F) and dissolve the soda. Add the detergent.

Add fleece and soak 15 minutes.

Use a stick to immerse fleece but do not agitate.

Tip fleece into drainage container.

Pour over 80°C water. Continue rinsing until liquid is clear.

Place fleece into a washing machine.

Spin to remove excess water.

Place fleece over rack to dry.

Note: For Merino or super greasy, waxy wool, you may need to wash it twice.

Editor's note

The experienced team at Tallyho Woolcarding are passionate about wool. Barb and her husband Stuart farm 161 hectares (400 acres) and breed coloured Romney and Gotland Sheep. Barb is in charge of the industrial-size carder and Marilyn washes the fleeces before carding. They recently featured on national TVNZ programme Country Calendar. Visitors are welcome to their wool shop, Tallyho Woolcarding, on the farm. See www.tallyhowoolcarding.co.nz





Funky and Fabulous

BY ELSA KROGH, MARIAGER, DENMARK

Wild yarn can be really wild, as warp floats, in this plain weave scarf.

Wild yarn may be fat and fragile or gnarly and knotty but the combinations of fibres and novelties are fascinating. In their own right the yarns in a skein or ball are sure to draw attention but how to incorporate them into weaving is a challenge. Used in the weft, some of the character is lost and even the very big 2.5dpi reed can't cope with some of the really chunky yarn in the warp.

But here is a technique with floats in the warp direction. So long as they are strong enough to be manipulated, even the wildest yarns can be accommodated! These warp floats are added as a kind of supplementary warp, but do not go through the reed. Each length of this pattern yarn can be wound around a small piece of cardboard or left in small balls. They are picked up or pushed down between the warp ends after a number of weft picks, i.e. the wild yarn is either hanging under the weaving or resting on top of it.

Note: it is best done on a loom on a stand, so the pattern yarns can fall unobstructed.

Technique

Plain weave with finger manipulated warp floats.

You will need:

Loom: 25cm (10ins) or wider rigid heddle
Reed 40/10 (10dpi) reed

Warp and weft yarn: Ashford Merino 4ply
(100% Merino; 200m/218yds; 50gm) 2
balls Ballet #803

Warp pattern yarn: art yarn cut into 7
lengths each 190cm (75ins) long and
wound on mini-shuttles, pieces of
cardboard or rolled into small balls

Here's how:

Total warp ends: 68

Total warp length: 200cm (79ins)

Finished width: 15cm (6ins)

Finished length: 180cm (70ins)

Warping

Warp 68 ends using the Merino 4ply yarn.

Weaving

1. Weave a few picks of scrap yarn to spread the warp ends, and then weave about 10 more picks also with scrap yarn, leaving a small gap between these two groups. Check that the warp between here and the front beam is long enough for the planned fringe.
2. Here comes the only tricky part of this technique – starting the floats. Place the floats equal distance across the warp threads.
3. Push the beginning end of each pattern yarn down in the gap between the two groups of scrap yarn. The end pushed down should be as long as the planned fringe in the finished scarf.
4. Now take every second one of the pattern mini-shuttles and push them down after the last scrap yarn pick, taking care not to pull the beginning length up from the gap. Leave the other mini-shuttles on top of the scrap yarn weaving. If you find the pattern yarn too slippery, you can anchor all the pattern ends with a pin each in the scrap yarn weaving.
5. Begin the proper weft leaving a weft



Manipulate the pieces of art yarn by hand bringing them up and above the weaving or push down below

end as long as four times the weaving width. Weave 15 picks. The pattern mini-shuttles hanging under the weaving are now picked up and those resting on top are pushed down in the spaces between the warp ends.

6. Before weaving again, take a blunt needle and thread the long weft tail into it. Hemstitch around three ends, three picks and catching the pattern yarn end. Continue hemstitching across the width of the warp, incorporating the pattern yarns as you go.
7. Weave 15 plain weave picks. Change the places of the pattern mini-shuttles, every second going down, the others going up. Continue in this way the length of the warp.

8. End with 15 picks and hemstitching across the width with the last end of the weft.

There are so many ways to use this technique; you can use two or several different yarns for the pattern, maybe all in one colour, but different textures. Or the other way round, one type of yarn in different colours. Or, with a striped warp, the fancy yarn can be placed between the stripes.

Editor's note

Elsa, who for over twenty years was our distributor for Denmark, is an author and weaver. She has written several books including *The Ashford Book of Weaving Patterns from Four to Eight Shafts* and featured in many issues of *The Wheel* including Bronson Check on the Rigid Heddle Loom (Issue 20), Overshot on Opposites (21), and Summer and Winter (23). Many of her patterns are sourced from archival material from local museums. Elsa brings a wonderful sense of continuity as well as smart Danish style.



Used as a supplementary warp float, you can weave with really wild yarn



A background warp of cotton and floats of fat green/grey singles plied with a black moderate eyelash yarn



A baby with light brown hair and blue eyes is sitting on a light grey surface, wearing a grey hand-knitted jacket over a red and white striped shirt and dark blue pants. The baby is looking towards the camera with a slight smile. The jacket has a wide collar, a single button closure, and ribbed cuffs and hem.

The Russ Jacket

BY MARION CAMERON, MASTERTON,
NEW ZEALAND

This simple jacket for Walter Ashford (aged 7 months) is knitted in one piece and can be easily adapted for different sizes, patterns, and yarns.

Walt in his hand spun jacket

You will need:

Wool: 250gm (9ozs) of wool spun medium (about Aran/10ply weight) and plied. Using the ruler test, 9 wraps per 2.5cm (1in)
Or Ashford DK 8ply yarn (100% wool, 202m/221yds, 100gm) x 2 balls

Sizes:

6 months – Ashford DK using 4.0mm (US6, UK8) needles
9 months – Hand spun using 4.5mm (US7, UK7) needles

Abbreviations

k, knit; k2tog, knit 2 sts together; p, purl; sts, stitches; yo, yarn over

Here's how:

Back:

Cast on 56sts and work 9 rows in garter stitch (every row knit).

Pattern:

Row 1: knit

Row 2: k3, purl 50, k3.

Repeat rows 1-2 twice more

Rows 7 – 10: knit

These 10 rows form the pattern.

Repeat until 46 rows in total, approx.

15.5cm (6ins) or 18cm (7ins).

Sleeves:

Working in garter stitch (every row knit), cast on 8 stitches at the beginning of the next 10 rows (136sts).

Work a further 28 rows in garter stitch.

To shape neck:

Knit 59sts, cast off 18sts, knit to end (59sts).

Work each front separately.

Left front:

Knit to neck edge. Cast on 14 stitches. (73sts)

Continue in garter stitch for further 31 rows, finishing at cuff edge.

To complete the sleeve, cast off 8 stitches at the beginning of the next row and following 4 alternate rows (33sts).

Continue front in pattern:

Row 1: k

Row 2: k3, p25, k5

Repeat Rows 1-2 twice more

Rows 7 – 10: knit

These 10 rows form the pattern. Repeat pattern until 46 rows are completed.

Work 9 rows garter stitch.

Cast off.

Right front:

Join wool to neck edge, knit to cuff.

Knit 1 more row to centre front. Cast on 14sts.

Knit 31 rows finishing at cuff edge. Cast off 8sts at the beginning of next row and following 4 alternate rows (33sts). Knit one row finishing at the cuff edge. Work in pattern as for left front but note the purl row will read k5, p25, k3.

A buttonhole can be made in the front band in the first row after the garter stitch stripe.



On the left front: k2, yo, k2tog, k to end.

On the right front: k3, p25, k1, yo, k2tog, k2.

Collar:

Pick up 14 (15 for DK version) sts from each front and 21 (23) from back neck (49sts (53sts)).

Work 16 rows in garter stitch. Cast off.

To make up. Join sleeve and side seams but you may like to leave the side seam open below the bottom 4 rows of garter stitch.



Walt in his DK yarn jacket, with mum Lucy Ashford

Editor's note

Marion's pattern has been one of the most popular in *The Wheel*. We are delighted to see our grandson wearing his own "Russ" jackets.

Double Heddle Waffle Weave *Kitchen Towels*

BY KURT PAYNE, AUCKLAND, NEW ZEALAND

Waffle weave, also known as honeycomb, is usually woven on four or more shafts but follow Kurt's pattern and make these smart and useful towels on your rigid heddle loom!



Ashford Yoga yarn has a slight elasticity which not only makes it perfect for rigid heddle looms but makes double heddle weaving a breeze with a consistent shed, which is often unobtainable with plain cotton.

These kitchen towels feature a super squishy and absorbent waffle weave, perfect for drying hands or dishes and thick enough to insulate. The little woven cells create more surface area helping waffle towels absorb and release moisture quicker. Choose two or more colours in blocks or random stripes and combine colours in your warp to make three unique towels, a wonderful gift from your loom.

The direct warping may look complex, but you will find it quite fast after the first few repeats of the pattern. Weaving the waffle structure without having to use pickup sticks is pleasant and surprisingly fast, with a sequence which is easy to remember.



Kurt

Size: Makes 3 towels measuring 42 x 68cm (16½ x 27ins)

You will need:

Loom: 50cm (20ins) or wider rigid heddle with second heddle kit

Reed: 2 x 50/10cm (12.5dpi)

Warp yarn: Ashford Yoga yarn (82%

cotton, 18% nylon core,
1260m/1386yds, 200gm) #42

Honeysuckle 100gm, #54 Freesia 100gm

Weft yarn: Ashford Yoga yarn (82%

cotton, 18% nylon core,
1260m/1386yds, 200gm) #42

Honeysuckle 100gm, #54 Freesia 100gm

Other: Waste yarn for header and ties,
sewing machine and matching sewing
thread

Here's how:

Total warp ends: 454 (yarn is used
doubled throughout)

Total warp length: 2.85m (3yds)

Width in reed: 45.5cm (18ins)

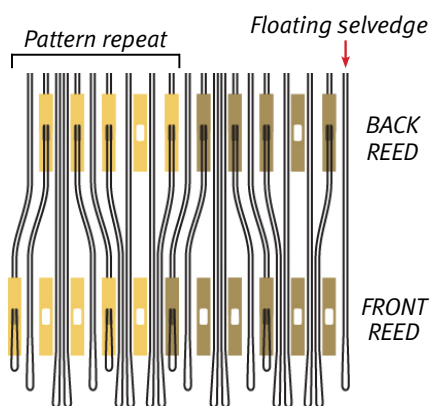
Finished width: 42cm (16½ins)

Warping

Clamp your loom to a table and your
warping peg 2.85m (3yds) away.

I recommend warping the back reed first,
although it is possible to thread both
reeds at the same time if you have sharp
eyes!

Place the back reed into the neutral
position and begin warping 22.75cm
(9ins) left of centre by tying your yarn to
the back warp stick and pulling your first
warp thread loop through a slot in the
back reed. This first loop will be one of
the floating selvages.



Threading chart

Continue warping following the chart
carefully. The yarn will be pulled double
through different combinations of slots
and eyes. The pattern is a 10 double
thread repeat.

When you have warped to the other side
and finished the last half repeat, pull a
final double warp thread loop through a
slot to make the other floating selvedge.
Wind on your warp, placing cardboard
warp sticks at intervals.

Place the front reed in position and pull
the first loop through the slot directly in
front, to be the floating selvedge.

Follow the pattern for the rest of the
front threading.

After every repeat of 10 warp loops, hook
a crochet loop of waste yarn around the
finished group when you are sure it is
perfect. That makes it easier to count
back and check your threading later.

When you have warped to the other side
and finished the last half repeat, pull a
final loop through a slot to be the other
floating selvedge.

Tie onto the front warp stick, either
directly or leash on.

Weaving

It is important to use a selvedge because
the pattern sometimes requires you to
weave two picks in the same shed. When
weaving always go over the selvedge
thread as you take the shuttle into the
shed and come out under the selvedge
thread on the other side.

For headers at each end of the warp, use
the following sequence using waste yarn.
Back reed up, weave one row, return to
neutral and beat with the front reed.
Back reed down, weave, return to neutral
and beat with the front reed.

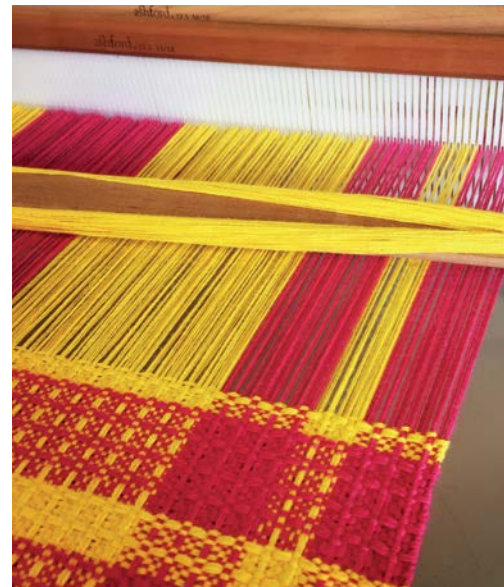
For each towel weave 75cm (29½ins)
in Yoga yarn doubled. Use two ends of
the same or different coloured yarns,
changing colours for stripes as desired.
Follow this sequence for the waffle
weave.

Back reed down, weave, return to neutral
and beat with the front reed.

Front reed down, weave, return to
neutral and beat with the front reed.

Front reed down, weave, return to
neutral and beat with the front reed.

Back reed down, weave, return to neutral



and beat with the front reed.

Back reed up, weave, return to neutral
and beat with the front reed.

Both reeds down, weave, return to
neutral and beat with the front reed.

Both reeds down, weave, return to
neutral and beat with the front reed.

Back reed up, weave, return to neutral
and beat with the front reed.

There is no need to leave a gap between
towels, just continue weaving.

Finishing

Remove weaving from the loom.

Secure the ends of each towel by sewing
a narrow zigzag stitch along each edge
to be cut.

Cut each towel off close to the stitching.
Fold each end over 6mm (¼in) then
12.5mm (½in) to form a hem then edge
stitch in place.

Finish with a warm wash then trim any
loose threads close to the fabric surface.

Editor's note

Kurt lives in Auckland, NZ, spinning prize
winning yarns, weaving cloth, machine
and hand knitting garments for fashion,
film, and theatre. His kitchen is filled
with plain, twill and waffle weave towels,
a joy to use and perfect gifts. Follow Kurt
on Instagram @manknitea
Kurt's work has featured in several
issues of *The Wheel*. These towels first
appeared in Issue 31.

Garter Stitch Cardigan

A country casual cardigan in simple garter stitch is super comfortable and warm. Knit in hand spun or commercial yarn.

Measurements:

To fit bust	81	86	91	96	101	cm
	32	34	36	38	40	ins
Finished	100	105	111	116	121	cm
measurements	40	42	44	46	48	ins
Sleeve length	43	45	45	45	46	cm
	17	17¾	17¾	17¾	18	ins

You will need:

Ashford sliver

Main colour Merino Fog	500	500	600	600	600	gm
	17½	17½	21	21	21	ozs
Contrast colour 1	200	200	200	200	200	gm
Merino Slate	7	7	7	7	7	ozs
Contrast colour 2	200	200	200	200	200	gm
Alpaca/Merino Granite	7	7	7	7	7	ozs

Spin the sliver as a medium/fine single. Ply two singles together to produce an 8ply/double knit equivalent yarn. Using the ruler test 11 wraps per 2.5cm (1in).

Other: Knitting needles 1 pair of 4.00mm (US6, UK8), buttons 6

Gauge (Tension):

18sts and 34 rows to 10cm (4ins) over garter stitch using 4.00mm (UK8) needles. If you obtain more sts per 10cms than specified, use larger needles, if less use smaller needles.

Abbreviations:

Alt, alternate; beg, begin(ning); cm(s), centimetres; cont, continue(ing); fin, finish(ing); foll, follows(ing); gst, garter st (every row knit); inc, increase(ing); K, knit; meas, measures; patt, pattern; rem, remain(ing); rep, repeat; rev, reverse(ing); RS, right side; tog, together; st(s), stitch(es); WS, wrong side; M, main colour; C1, contrast colour 1; C2, contrast colour 2.

Note – Instructions are given for first size with larger sizes in brackets (). Where only one figure is given, this applies to all sizes.

* Armhole shaping - beg in this colour band

** Fronts only - neck shaping - beg in this colour band

*** Shoulder shaping - beg in this colour band

Here's how:

Back:

With M, cast on 90 (94, 100, 104, 110)sts. Work in gst 116 (120, 122, 122, 122) rows or length desired.

Now work:

2 rows in C1, 8 rows in M, 4 rows in C1, 4 rows in M.

* 10 (10, 12, 12, 14) rows in C1.

*On rows 7 and 8, cast off 5sts at beg of each row. Dec 1st at each end of next and every alt row until 68 (72, 74, 76, 78)sts rem, keeping colour patt correct as foll:

2 rows M, 10 (10, 10, 12, 12) rows C1, 2 rows C2, 8 (8, 8, 10, 10) rows C1, 4 rows C2, 4 rows C1.

** 10 rows C2, 2 rows C1.

*** 22 (22, 22, 24, 24) rows C2.

***When 18 of these rows have been worked, shape shoulders as foll:

Cast off 9 (10, 10, 7, 7)sts at beg of next 2 (4, 4, 6, 6) rows. Size 81cms only, cast off 10sts at beg of next 2 rows. 155 (161, 165, 173, 175) rows worked in all from beg. Cast off rem 30 (32, 34, 34, 36) sts.

Left front:

With M, cast on 51 (55, 56, 58, 61)sts.

Follow colour patt as for back to *.

Shape Armhole – Cast off 5sts at armhole edge. Keeping colour patt correct, dec 1st at armhole edge on alt rows until 36 (37, 39, 42, 43)sts rem. Follow colour patt as for back until ** 10 rows C2.

Shape Neck – On 8th row, at neck edge, cast off 9 (11, 11, 13, 13) sts. Dec 1st at neck edge on alt rows until 19 (20, 20, 21, 21)sts rem. Foll colour patt to *** 22 (22, 22, 22, 24) rows C2.





Elizabeth enjoys her garter stitch cardigan

Editor's note

This jacket looks equally lovely knitted in hand spun or with commercial yarn. I spun our Fog and Slate Merino sliver and the alpaca/Merino Granite blend in a chunky 8ply for my cardigan. The pattern appeared in Issue 18 of *The Wheel* in 2006, knitted in natural coloured hand spun yarns and modelled by our daughter Lucy.



Lucy

Shape Shoulders – On 21st row, at armhole edge cast off 9 (10, 10, 7, 7)sts at beg of next 1 (2, 2, 3, 3) alt rows. Size 81cms only: Knit 1 row, cast off rem 10sts.

Right front:

Work same as left front, but rev shapings, and spacing 6 buttonholes evenly up centre front edge as foll:
1st button hole: Knit 3 rows.

4th row: K3 sts, cast off next 3 sts, knit to end.

5th row: Knit to cast off sts, cast on 3sts, knit last 3sts.

Sleeves:

With M, cast on 42 (42, 42, 44, 46)sts and

work in gst for 25 rows. Inc 1st at each end of last row.

Inc 1st at each end of every foll 8th row until work meas 40 (41, 41, 42, 42)cms.

2 rows C1, 8 rows M, 4 rows C1, 4 rows M.

* 10 (10, 12, 12, 12) rows C1.

Shape Sleeve Top – Keeping colour patt correct, cast off 5sts at beg of rows 7 and 8 C1.

Still keeping colour patt correct:

Dec 1st at each end of alt rows 7 times 40 (42, 44, 48, 54)sts.

Dec 1st at each end of every foll 3rd row 4 times 32 (34, 36, 40, 46)sts.

Dec 1st at each end of alt rows 6 times.

2 rows M, 10 (10, 10, 12, 12) rows C1, 2 rows C2, 8 (8, 8, 10, 10) rows C1, 4 rows C2, 4 rows C1

4 (4, 4, 4, 8) rows C2.

Cast off rem 20 (22, 24, 28, 34)sts loosely.

To make up:

Join shoulder seams.

Sew sleeve tops to armholes.

Join side and sleeve seams, rev seam on lower 5cms of sleeve. Fold up 2.5cm (1in) for cuff.

Sew 6 buttons to left front to match buttonholes on right front.

Press garment lightly on WS.



Creativity at its Core

BY AMANDA MCLENNAN, ABU DHABI,
UNITED ARAB EMIRATES

Beautiful and unique designs
are made when corespun art
batts are spun and woven.

I first picked up a loom about five years ago, shortly after my daughter was born. We were living in Singapore, and I was looking for some unusual textural décor for her nursery. I found a local artist who was offering beginner classes and instantly I was hooked. It was the perfect quiet hobby to occupy my time at home with my daughter.

Soon after, we moved to the United Arab Emirates and as I began to push my creative limits with weaving, I became frustrated with the lack of local availability of interesting yarns to weave with. My mum is a spinner and, on a trip to visit us in 2017, she gifted me a drop spindle and a brief spinning lesson which enabled me to start experimenting with making my own basic art yarn.

By 2020, I was spinning almost every day and had taken the plunge with buying my own wheel, the Kiwi 3 with Super Flyer.

The last year has been a whirlwind, with the boom in the creative fibre community, thanks to the enforced stay-at-home orders, with more people picking up a frame loom than ever before. I love helping people choose a yarn for a project, working on custom art yarns and having the opportunity to

channel my own creativity into a piece of art that goes on to be made into another piece of art!

Without a doubt, chunky, textured, plied corespun yarn is in the top three most in-demand styles of art yarn, and with good reason; there are no limits on how creative you can get with a corespun art yarn. Typically combining a 'core thread' around which other fibres are wrapped, it is often spun with 'mix-ins' like scraps of rope, long locks, metallic threads, beads, velvet... the list can go on! And because it is corespun, it has a weighty substance and durability that many other yarns don't, which is necessary for when it's being pulled through warp threads repeatedly.

The Kiwi 3, combined with the Super Flyer, made an ideal choice for me as a spinner. The wide orifice on the Super Flyer means there is almost no limit on how chunky your yarn can be spun, yet the wheel is lightweight, foldable, and is so easy to use.

I'm going to take you through the creation of a corespun art yarn, from carding the art batt, tips on corespinning and some ideas on how to use your finished yarn in a woven wall hanging.

Carding an Art Batt

When choosing fibres for an art batt, the rule of thumb is 'anything goes'! I usually start with a neutral base, choose one or two accent colours and then some textured elements, such as rope scraps, locks, metallics and usually a thread that will auto-ply around the yarn as I am spinning.

You will need:

60-120gm (2-4ozs) of fibres, including a base wool, such as Merino (weight depending on the size the carder can hold)

Drum carder

'Mix-ins' such as fibre scraps, ribbon, metallics, threads, recycled sari-silk etc

Tips

- When starting an art batt, it is important to lay down a thin base layer before adding in any smaller loose pieces of fibre. This will ensure that nothing falls out of the batt as it's being removed from the carder.
- Work in layers. Don't add all the mix-ins in one go. Layering will ensure there is an even distribution of accents and textures throughout the finished yarn.
- Keep any pieces of fibre that can't be carded (such as ribbon or locks, which I like to keep un-carded and then spin in by hand) to one side and these can be added in when spinning.

Corespinning on the Kiwi 3 with Super Flyer

When setting up to corespin, I recommend setting the wheel to the largest whorl and a medium tension. It is important to minimise the twist that will be added in; the difference in corespinning to other types of spinning is that there is very little true twist needed. The fibres just need to wrap around the core, so having the wheel set like this will help prevent overtwisting. You will also want to work fairly closely to the orifice for the same reason.

The beauty with corespinning is that the core can be almost anything, as long as it is strong. It is an ideal opportunity to give a new lease of life to 'ugly' yarns that are stashed away.

I choose to use a fine mill-spun mohair. It gives a beautiful airy feel to my yarns and the locking in between the mohair fibres and the fibres I'm spinning gives it extra strength.

When attaching the core yarn to the leader, build up a light amount of twist. Draft out a fine layer of fibres from the batt and holding the drafted fibre at a 90-degree angle to the core yarn, allow the fibres to gently start wrapping themselves around. Spin like this for around a metre (yard). Once you are comfortable with the first stage, you can start to draft out varying amounts of

fibre, playing with the amount that wraps around and how tightly or loosely it wraps to give different textured effects.

Moving your batt around and drafting fibres from different sections will also give various different feels to your finished yarn. Spinning slowly will allow you to ensure your mix-ins are coming out 'on top' and are visible on the outer layer of the yarn. If you wish to add in extras that are not in your batt, such as pieces of ribbon or locks, you can anchor the ends in against the core and allow the fibre to wrap around a small section to secure them in. Once your batt is finished, continue to 'spin' a metre (yard) or so of the core yarn onto the bobbin.

Once my single corespun yarn is finished, I usually decide at that point if I am going to ply it or not. Some corespins can look beautiful left as a single. However, others find the coiled 'bubble' effect achieved with plying it more desirable.

To coil ply, you will need to switch bobbins and choose a strong thread, in a colour of your choosing (either match it to the yarn or go for one that is contrasting in colour). Crochet cotton usually works really well for this.

Attaching your metre (yard) of core yarn that you left at the end of the single to your leader, along with the ply thread, standard ply these together. Once the start of the corespun reaches the ply



thread, move the angle of the corespun single out to 90°, keeping the ply thread straight out from the orifice. Allow the single to wrap around the ply thread. If you wish to achieve a more spiralled effect, reduce the angle between the ply and the single. Play around with this for different effects throughout your yarn.

Weaving with an Art Yarn

You have your finished yarn! What next? Like the whole process before it, the uses for your yarn are limitless! Depending on how chunky it has been spun, you may want to use it as an accent in a knitted scarf, use it for needle felting sculptures or make a woven wall hanging with it.



Use a felting needle to secure the art yarn

Here are some tips for using a corespun yarn in a weaving.

- When you cut sections from the yarn to use in a weaving, tie a small knot in each end (or lightly felt to secure with a felting needle). This is particularly important if you're going to be leaving one end hanging loose in the fringe.
- A felting needle is a useful tool to have on hand when working with an art yarn. You can use it to secure the art yarn into sections of the weave and give it more structure, rather

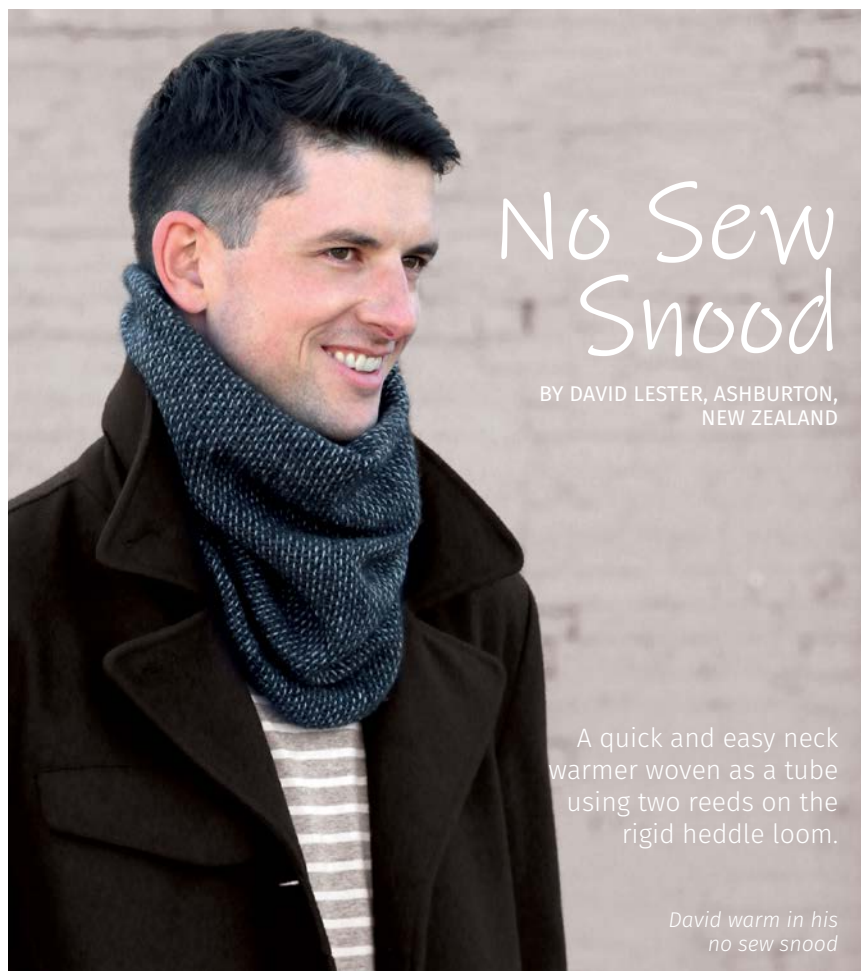
than just weaving it in/out between the warp threads.

- Art yarn looks particularly beautiful when it is allowed to drape over the front of woven sections and layering can add dimension and texture to an otherwise simple piece.
- Don't feel the need to use a whole yarn in one weave. Use small amounts to accent and highlight areas.
- Have fun with corespinning and weaving with your art yarn and the results will be beautiful!



Editor's note

Amanda is a Scottish textile artist currently living in Abu Dhabi, in the UAE with her family. This article featured in Issue 33 of *The Wheel*. She took a modern weaving class in 2016 and started spinning in 2017 using a drop spindle. Spinning luxury unique art yarns is now her full-time business! Follow Amanda on Instagram @bywildjuniper



Here's how:

Total warp ends: 156

Total warp length: 100cm (39½ins)

Finished warp length: 56cm (22ins)

Finished width: 32cm (12½ins)

Warping

There are easy-to-follow instructions on how to warp up your loom with a double heddle for double width projects in the Ashford *Learn to Weave on the Samplelt Loom* booklet. When weaving a tube, the only difference is the sequence of your weaving positions described below. Warp the complete width of the reed (40cm/16ins) with the light grey yarn.

Weaving

Weave complete warp length with the dark grey yarn repeating the following weaving sequence:

Shed 1 (top layer) – Place the front reed in the up position. Weave one pick. Left to right.

Shed 2 (bottom layer) – Place the back reed in the down position. Weave one pick. R-L

Shed 3 (top layer) – Both reeds in the rest position, slide top pickup stick forward and turn on side. Weave one pick. Slide top pickup stick to the back. L-R

Shed 4 (bottom layer) – Both reeds in the rest position, slide bottom pickup stick forward and turn on side. Weave one pick. Slide bottom pickup stick to the back. R-L

Finishing

Remove weaving from the loom. Knot ends and trim fringe to the desired length. Warm hand wash and dry flat.

Exploring double heddle weaving techniques has added another whole dimension to my rigid heddle loom. I have enjoyed experimenting with double width, double layer, and double density techniques. For this project I wanted to make a cosy snood from a woven tube. It is a simple and exciting way to utilise the second heddle option, now standard on all Ashford rigid heddle looms, to create a finished garment without the need to sew - which really appealed to me!!

For my snood, I chose a fluffy possum/Merino yarn warped using two 5dpi reeds so that my fabric would be a slightly looser weave for increased breathability. I also wove twice the desired finished length to wear the snood folded double layer for extra warmth.

You will need:

Loom: 40cm (16ins) rigid heddle or wider with double heddle kit*

Reed: 2 x 20/10cm (5dpi)

Warp yarn: 4ply 75% Merino, 25% Possum (240m/262yds; 50gm net) light grey, 1 skein

Weft yarn: 8ply 75% Merino, 25% Possum (155m/170yds; 50gm net) dark grey, 1 skein

Other: 2 x pickup sticks



Editor's note

David enjoys the versatility the double heddle gives to our rigid heddle looms. See Issue 28 of *The Wheel* for his beautiful woven blanket.

*All new Ashford Rigid Heddle, Knitters and Samplelt looms have the second heddle option as standard on the loom. For older rigid heddle looms you will need a second heddle kit.



Mixing Colours

BY KATE SHERRATT,
ASHBURTON, NEW ZEALAND

The dyer is the complete master, or should I say, mistress of yarn design!

In my studio with just three colours and black I can create beautiful multi-hued wool and silk rovings for my projects. Here are three of my favourite colour-mixing recipes.

The direct application method of dyeing is easy and gives you good control of the end result. And if I use precise measurements and keep good records, I can replicate the results.

You will need:

Fibre: 50gms (1¾ozs) of Ashford Silk/Merino blend (20% Mulberry silk 80% Merino) # 108 Vanilla

Dyes: 10gms (⅓oz) Ashford wool dye each of Bright Yellow, Bright Pink, Sapphire and Coal

White vinegar 500ml (1pt)

Other: Four 1 litre (1¾pt) containers, five syringes, plastic cling film, measuring spoons, foam brush, rubber gloves, bucket, stirrers, microwave (used only for dyeing), jars

Here's how:

1. Prepare a bucket of warm water with a drop of dishwashing detergent. Add sliver and soak for 30 minutes.
2. In a 1 litre container mix 10gm (⅓oz) dye powder with sufficient hot water to dissolve. Add 150ml (5¼flozs) of white vinegar. Fill the container with cold water. Do this for all four colours. From these four dye solutions you can create all the colours of the rainbow and more!
3. Choose a colour recipe (my three favourite recipes are on the next page). Using your syringes add the correct amount of the dye solutions (and water if required by the recipe) for each colour into jars.
4. Place plastic cling film onto a flat surface. Ensure you have enough wrap to cover the sliver. Squeeze out excess water from the sliver and lay onto the wrap.
5. Using your brush, paint the sliver with the dye liquor from the jars. Ensure that the sliver is well covered with the





My yarn, dyed, spun and Navajo-plied

dyes. Wearing gloves, use your hands to push the dye into the fibre and push the colours together.

6. Wrap the sliver into a parcel by folding in the sides and then the ends.
7. Place the wrapped sliver into the microwave. On high, microwave for 1 – 3 minutes depending on your microwave. Check after one minute to see if the dyes are fully absorbed (exhausted).
8. Allow the sliver to cool and then remove from the wrap. Rinse in warm water, then in cooler water. Spread the sliver out on a towel or sheet and leave to dry.



	1% solution				
	Bright Yellow	Bright Pink	Sapphire	Coal	Water
Autumn					
Light Red	30ml	30ml		1ml	
Gold	60ml	2ml	1ml		
Red/Brown	30ml	30ml		5ml	
Brown	40ml	20ml	10ml		
Olive	60ml			8ml	

Ocean					
Teal	3ml	6ml			60ml
Brown	40ml	20ml	10ml		
Dark Brown	40ml	20ml	10ml	2ml	
Blue		2ml	40ml		40ml
Pastel Blue	Add 2ml of Blue colour solution +				60ml
Green	60ml		30ml		
Pastel Green	Add 2ml of Green colour solution +				60ml

Pastels					
Pastel Magenta		2ml			60ml
Violet		30ml	30ml		
Pastel Violet	Add 2ml of Violet colour solution +				60ml
Green	60ml		30ml		
Pastel Green	Add 2ml of Green colour solution +				60ml
Pastel Black				1ml	60ml

More information: For safety information and more ways to use the Ashford dyes please go to the web site www.ashford.co.nz/dye-info

Ashford Country *Hand Spun Jersey*



The iconic NZ hand spun jersey

Editor's note

The pattern for the classic NZ jersey first featured in Issue 18 of *The Wheel* in 2006; this version was hand spun and knitted by Ann Loffhagen, Oxford, NZ. To see how to join the shoulder seams go to www.ashford.co.nz/wheel35

Ashford's original natural hand spun jersey is a classic. In New Zealand you see this jersey in every shape and form. Teenagers wear it with jeans – often two sizes too big! Parents wear it as a comfortable country classic; children as a warm and practical outdoor kit. It has even been worn by Annelise Coberger, New Zealand's Olympic ski champion.

If using fleece, choose a soft Romney, Corriedale, or a cross bred fleece. Wash the fleece and dry before spinning. Use a flick carder to lightly open the tips and spin a bulky single. Lift your fingers from the twist from time to time to make "texture". It is best if the yarn for this project is a little bit "bumpy" or "lumpy". You will create your own "original" style hand spun yarn. Treadle very slowly but feed the yarn onto the bobbin quite quickly. Remember the day you spun your first ever "lumpy, bumpy" wool? Well, that would be ideal for this project! Ply two singles together – do not over ply. This will result in a soft bulky yarn which is very light. Try the ruler test to see if your yarn is the right weight for this jersey.

We used our Ashford mill ends blend, Montage, for this updated version. It is a blend of all our fibres processed at our mill and produces interesting colour variations as you spin it.



Annelise Coberger, NZ ski champion, wears the iconic NZ jersey

Ruler Test:

Wind the yarn around the ruler – 11 wraps per 2.5cm (1in) is perfect. If your yarn is extra textured it may be a little different – don't worry! Your jersey will be a real "original". Take the plied yarn from the bobbin onto the Niddy Noddy to make skeins.

Washing Instructions:

Wash the skeins in warm soapy water very gently. Rinse in warm water. Dry outside on a warm sunny day in a gentle wind. When your jersey needs washing, hand wash as above and dry flat on a towel.

You will need:

Hand spun yarn: Approx. 950-1000m (1040-1090yds)

Needles: 4mm (US6, UK8), 5mm (US8, UK6), 4mm (US6, UK8) circular needle

Other: Wool needle



Montage fibre spun to a soft bulky yarn

Knitting Instructions

Abbreviations: k, knit; k2 tog, knit 2 sts together; p, purl; p2 tog, purl two sts together; ssk, slip 2 sts knit wise, place back onto the right hand needle and k2tog; ssp, slip 2 sts knit wise place them back onto the right hand needle and p2tog; ; sts, stitches; stocking stitch, 1 row knit followed by one row purl; s1, slip one stitch; yb, take yarn backward; yf, bring yarn forward

Size: Medium (actual size chest 108cm/42ins), length 68cm (27ins), sleeve 50cm (20ins) or adjust sleeve length as required.

Tension: 8.5sts to 5cm (2ins) in stocking stitch on 5mm needles.

Here's how:

Back:

Using 4mm needles cast on 85sts and k1, p1 rib for 14 rows - increase 7sts evenly spaced on the last row (92sts).

Tip: For a neat increase pick up the thread between two stitches from the previous row and knit into the back of it.

Tip: Do not make any of the increases right on the edge so you have a neat selvedge for sewing up.

Change to 5mm needles. Work in stocking stitch until work measures 68cm (27ins).

Shape shoulders using short rows:

Row 1: k until 16sts remain, * yf, sl1, yb, put slipped st back on right hand needle, turn*.

Row 2: p until 16sts remain, ** yb, s1, yf, put slipped st back on right hand needle, turn **.

Row 3: k until 32sts remain, repeat from * to*.

Row 4: p until 32sts remain, repeat from ** to **.

Row 5: k to the end of the row picking up the wraps and knitting together with the wrapped st.

Row 6: p to the end of the row picking up the wraps and purling together with the wrapped st.

DO NOT CAST OFF.

Front:

Work same as back until work measures 58cm (23ins).

Next row: k38, slip the next 16sts onto stitch holder, turn.

Next row: p2tog, purl to end.

Next row: k to last 2sts, k2tog. Decrease the same way at the neck edge on the next 3 rows (32sts). Continue until front measures 2 rows shorter than the back.

Shape shoulder:

Next row: k.

Next row: p until 16sts remain. Wrap stitch as on back and turn, knit to the end.

Next row: p picking up the wrap st and p together with the st. DO NOT CAST OFF.

Second side, join in wool and knit to end. Work same as other side decreasing

on neck edge using ssp and ssk for the decreases so that they slope the right way (32sts).

Work until 2 rows shorter than the first side and then shape the shoulder to match the other side. DO NOT CAST OFF.

To join shoulder seams:

Place front and back knitting right sides together with the front facing you. Take a third needle and knit together a st from the front needle and a st from the back needle. Cast off as you go. Continue casting off the front, then cast off the 28sts from the back neck, join the other side of the front.

Neckband:

Using 4mm circular needle, pick up 28sts across back neck, 18sts down front side, 16sts off stitch holder, 18sts up front side (80sts) Work 6 rows in k1, p1 rib. Cast off LOOSELY.

Sleeves:

Using 4mm needles cast on 41sts, k1, p1 rib for 14 rows increasing 4 sts evenly on the last row (45sts).

Tip: Make the increases 2 stitches in from the edges as this makes a neat selvedge for sewing up.

Change to 5mm needles and continue in stocking stitch increasing at each end of the 3rd row and every following 6th row until 79sts. Work straight until sleeve measures 50cm (20in) or length required. Cast off LOOSELY.

Making up:

Fold sleeve in half, place this point to shoulder seam. Measure down 25cm (10ins) on each body side. Using mattress stitch sew in the sleeves. Join sleeve and side seams.

Now try it on!



Use a mattress stitch to seam

Reusable Bags in Twill

BY RAVEN RANSON,
VICTORIA, BC, CANADA



Simple and striking, hand woven shopping bags are the perfect opportunity to play with vivid colours.

These bags are strong, but lightweight, to toss in your handbag for emergency shopping trips.

For Three Bags

You will need:

Loom: 40cm (16ins) or wider four shaft
Reed: 50/10cm (12dpi) sley 2 threads per dent

Sett: 10ep/cm (24epi)

Yarn: Ashford Cottolin 8/2

(1345m/1470yds, 200gms) 1 cone of each: Tulip #872, Denim Blue #846, Grey Pearl #882

Other: Belt Shuttle for the strap, sewing thread and a sewing machine.

Body of the bag

Here's how:

Number of ends: 384 threads, plus floating selvages

Width in reed: 40cm (16ins)

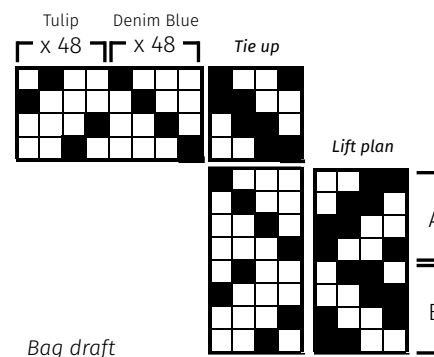
Warp length: 3m (3.3yds)

Finished size each bag: 35.5 x 35.5cm (14 x 14ins) plus the handle

Weave structure: 2/2 twill

Warping

Wind 192 threads Denim Blue and 192 threads Tulip. Thread as per the draft.



Weaving

Following treadling A, weave 2.5cm (1in) Grey Pearl for the hem and 20cm (8ins) Denim Blue. Treadling B, weave 20cm (8ins) Tulip and 2.5cm (1in) Grey Pearl for the base. Treadling A, 2.5cm (1in) Grey Pearl, 20cm (8ins) Tulip. Treadling B, weave 20cm (8ins) Denim Blue and 2.5cm (1in) Grey Pearl for the hem. Repeat for the other two bags.

Finishing

Remove from the loom and secure the ends with a zigzag stitch.
Machine wash and hang to dry.

Warp-faced strapping

Here's how:

Number of ends: 60 threads, plus floating selvages
Width in reed: N/A - no reed used
Warp length: 7.5m (8.3yds)
Weave structure: Warp-faced 2/2 twill

Warping

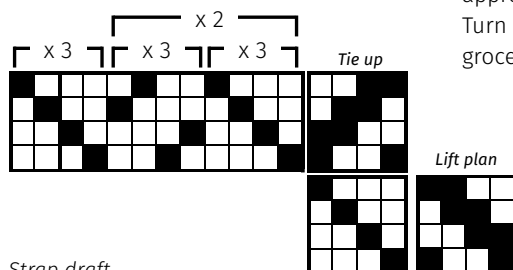
Wind 20 Grey Pearl, 4 Denim Blue, 12 Grey Pearl, 4 Tulip, and 20 Grey Pearl. Wind on the back beam and thread the heddles as per the draft. Remove the reed and tie directly onto the cloth beam.

Weaving

Using Grey Pearl for weft, weave as per draft, but instead of beating with the reed, beat against the fell line, inside the shed with the edge of the belt shuttle to create a warp-faced fabric.

Finishing

Remove from the loom and cut into 3 x 2m (78ins) lengths.



Brooklyn Four Shaft Table Loom



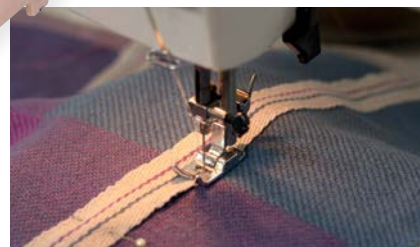
Weaving the warp-faced straps

Making the bags

Hem the top edges of the bag.
Fold and iron a crease to guide you, 7.5cm (3ins) in from each side.
Starting at the bottom of the bag, pin the strap along the creases, leaving loops for handles at each end. Sew the straps to the bag.
Right sides together, pin to match up the colours and sew the sides of the bag.
With the bag still inside out, pinch and pull apart the corner so that the seam sits on top and there is a little triangle made by the grey bottom of the bag. (see picture). Sew across this triangle, approximately one inch from the point.
Turn right side out and fill with delicious groceries.



Pin the strap to the bag



Sew on the strap



With right sides together, sew the bag sides



Sew across the corner triangle



Turn right side out

Editor's note

Raven spins yarn, weaves cloth, collaborates with sheep, wrangles llamas, hugs alpacas, weeds flax, and conspires with cotton on the family farm on the west coast of Canada. Follow her adventures on YouTube www.youtube.com/@CrowingHen
These striking bags first appeared in Issue 30 of *The Wheel*.



Felted Elegance

BY DELAND LIAO, TAIPEI, TAIWAN

A beautiful and unique accessory that is stylishly fashionable.

You will need:

Fibre: Ashford silk/Merino blend Salvia 90gm (3ozs), some Angelina metallic gold and silver, white silk chiffon 20 x 150cm (8 x 60ins)

Other: Bubble wrap 45 x 180cm (18 x 71ins), plastic sheets 45 x 180cm (18 x 71ins) x 2, net curtain fabric 45 x 180cm (18 x 71ins) x 2, towel, plastic piping, plastic gloves, rubbing pad (optional), liquid soap



Editor's note

Deland started her business, Founder Tek, in 1994, and became an Ashford dealer soon after. After 20 years the company became a family business with daughter Genie and son Mulder working alongside.

They supply equipment and offer beginner through to advanced felting, spinning and weaving classes with students coming from throughout Taiwan and also Hong Kong, Macao, and China.

Deland's felted scarf first featured in Issue 32 of *The Wheel*.

Here's how:

1. Cover a table with the plastic sheet.
2. Lay the silk chiffon on top.
3. Divide the fibre in half. Take one half of the fibre (45gm/1½ozs) for the front side. You will use 2.5gm on each end, 17.5gm for each side and 5gm for the centre pattern.
4. Starting on one side pull lengths of wool 5-6cm (2-2½ins) long and place two or three fine layers of the fibre in the same direction covering 2-3cm (1-1¼ins) of the chiffon. Repeat on the other side and both ends.



5. Take the remaining 5gm and make your own pattern in the centre of the silk chiffon.



6. For a little glamour add some Angelina.
7. Place the net on top.



8. Sprinkle with soapy water and pat into the fibre, ensuring the fibre is wet through.



9. Using the palm of your hand or a rubbing pad, rub the length of the scarf increasing in pressure as you work.



10. Gently peel off the net. Turn the scarf over and repeat steps 4-9.
11. Remove the net and replace with bubble wrap (bubble facing down). Roll around the pipe and tie firmly.



12. Place on a towel and roll backwards and forwards 100-200 times.
13. Open and check the felting process. If when pinched the fibre and chiffon lift together, the scarf is sufficiently felted. If not, repeat step 12.
14. Once felted remove the bubble wrap. Folding like a fan bring one end of the scarf to the other.



15. Rub vigorously in the centre.



16. Check to see if ruffles have been created. Accentuate them by hand if needed.
17. Once all felted, wash to remove the soap.
18. Roll in a towel to remove excess water.
19. Lay flat to dry.



20. Steam iron.



Don't Overlook Twill

BY BETTY BOOTH,
BALCLUTHA, NEW ZEALAND

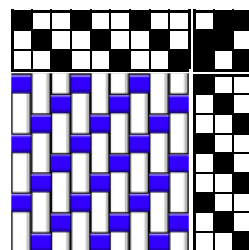
Twills are very versatile when designing for durability, for warmth, for drape, for crease resistance and for reflection of light, says professional weaver, Betty Booth.

Standard twills give distinctive clean diagonal lines which enhance woven apparel, household linens, blankets and other articles. A twill weave is easily identified by its diagonal parallel ribs. It is made by passing the weft thread over two or more warp threads and then under two or more warp threads with each successive pick moving one end sideways and thus creating its characteristic diagonal pattern.

It is usually a balanced weave but as it has fewer intersections than plain weave it is set closer and creates a more durable and water-resistant fabric. The fewer interlacings also allow the twill fabric to move more freely, and thus it is softer and more pliable, and drapes better. Twills can also recover better from wrinkles, and dirty marks show less on the uneven surface of twills than they do on other surfaces, such as plain weaves. So twill is often used in clothing or upholstery fabrics such as chino, drill, denim, gabardine, tweed, and serge.

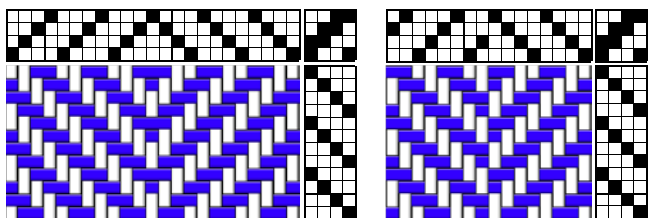
Twill can be woven on three, four, or more shafts and is often designated as a fraction, such as 2/1 in which the first number indicates the number of shafts that are raised, in this example, two, and the second number indicates the number of shafts lowered, in this example, one. The minimum number of shafts needed to produce a twill can be determined by totalling the numbers in the fraction. For this example, the number of shafts is three.

The main types of twill weave are straight twill, point twill and broken twill. Straight twill has an unbroken diagonal line usually at a 45 degree angle. When the line runs from left to right it is called a right-hand twill, and when it rises from right to left, it is a left-hand twill. There are many types of straight twill with 2/2 the most commonly used by weavers.



2/1 straight twill

Point twills are sometimes called "return" twills because the second part of the threading draft is a mirror image or a "return" of the first part. Herringbone is a popular point twill, so called because the reversed twilling creates the appearance of a herring fish bone. A famous example is the Turin Shroud which is a linen 3/1 twill in herringbone.



Herringbone

Dornik, a popular broken twill pattern

The broken twill is similar to a point twill, but a break occurs in the diagonal at the reverse point where a shaft is missed.

The slant of the twill line is influenced by the sett of the warp and weft yarns. If they are equal the line of the twill will be at 45 degree angle. To help beat to the correct angle it is helpful to cut a small square piece of cardboard in half diagonally and use this to measure the angle. If the warp is set closer than the weft the twill line will be more perpendicular and if the weft is closer the line will be more horizontal.

Twills can be warp faced, weft faced or balanced. Twill fabrics technically have a front and a back side, unlike plain weave, where the two sides are the same. The front side, or technical face, is generally more durable and attractive and is most often used as the fashion side of the fabric.

While testing the Katie Loom for Richard Ashford, I threaded this great little loom with a straight draw and used various yarns and different liftings.

Also known as a straight draft or straight threaded draft, this threading is in a continuous diagonal sequence, with each succeeding warp thread drawn through the succeeding shaft, in one direction only. The first thread is drawn through the first shaft, the second thread through the second and in this regular order until the last shaft is reached and the process is repeated, beginning with the first shaft.

My testing on the loom gives a good idea of the diversity of the twill weaves. With a large number of shafts the number of twill weaves becomes practically unlimited.

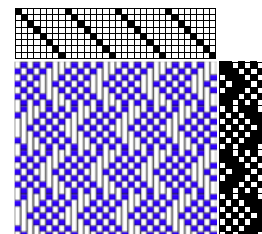
Remember, the sett is closer than for plain weave, floating selvages assist the neatness of edges and the 45 degree diagonal twill lines always look smart. So please don't overlook twills!

Editor's note

Betty, is now retired and Christina, her granddaughter, has inherited all of her Ashford looms. Betty is thrilled to see Christina and her five year old daughter Sara, carrying on the hand weaving tradition.

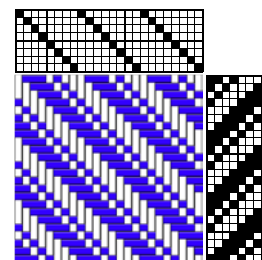
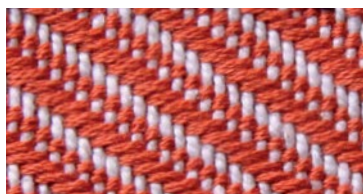
Here are three of my favourites

Warp and weft in 5/2 mercerised cotton in cream and brown



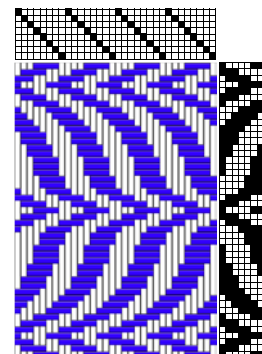
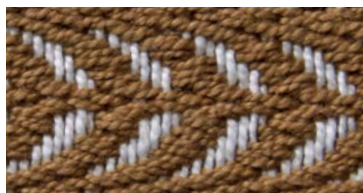
Twill 2_1_1_1_1_1

Warp and weft in 5/2 mercerised cotton in cream and red

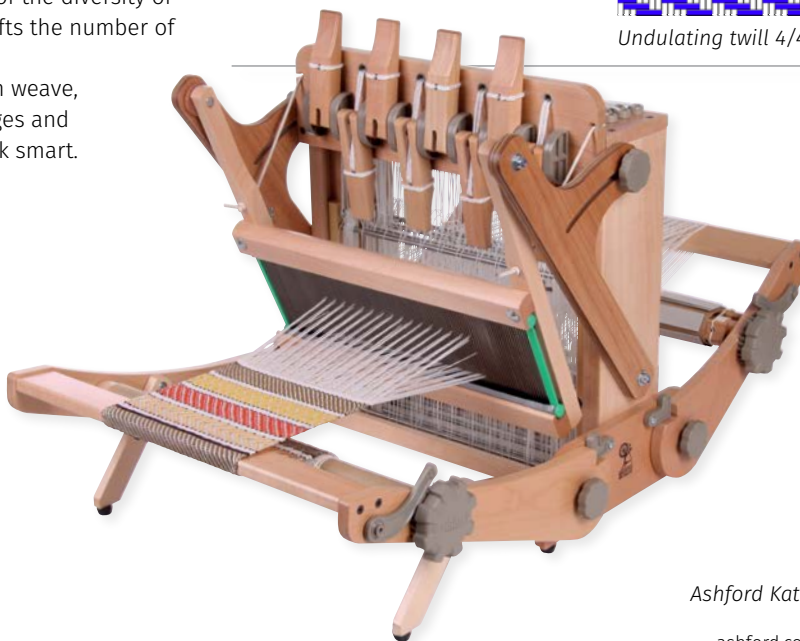


Twill 3_1_1_3

Warp and weft in 5/2 mercerised cotton in cream and khaki



Undulating twill 4/4



Ashford Katie Loom

Entrelac Baby Car Seat Cover

BY ROSE JOHNSTON, ASHBURTON, NEW ZEALAND

A cute and cosy car seat rug for Hugo knitted in entrelac with three shades of Ashford Merino DK yarn.



Hugo Lester-Ashford is snugly warm in his car seat cover

Editor's note

Rose's entrelac baby car seat cover pattern, that featured in issue 22 of *The Wheel*, has been very popular and makes a special and warm gift for new babies.

You will need:

Yarn: Ashford Merino DK
(100% Merino; 105m/115yds;
50gm net) 2 balls each of
Old Navy, Old Gold and Mist
Needles: 4mm (6US, 8UK)

Finished size: 55 x 80cm (21½ x 32ins)

Here's how:

Pass 1 - Starting triangles

Cast on 100 stitches.

Knit a swatch of ten blocks x 10 stitches

wide. To begin:

Purl 2, turn

Knit 2, turn

P3, turn

K3, turn

Continue this way, working one more stitch each time until you have purred 10 stitches. Do not turn. Look at your knitting - you have a triangle. Make nine more triangles in exactly the same way, ignoring the first one completely. Notice that the second and third triangles have their tips attached to the preceding stitches. Don't worry; it's sorted on the next pass.

Pass 2 - Side triangles and blocks

This pass is a little different. In order to have straight edges you need half triangles each end. Attach your second colour.

K2, turn

P2, turn

K in the front and back of first stitch (Kfb)

S1 K1 psso turn

P3, turn

Kfb, K1, S1, K1 psso turn

P4, turn

Kfb, K2, S1, K1 psso turn

P5, turn

Continue until you have used all 10 stitches of the triangle below. After the (Kfb, K8, S1, K1 psso) row, don't turn. You have made your first side triangle and there will be one of these half triangles at the beginning and the end of every other row. Your work should look like this:



Now pick up 10 stitches where shown circled below to continue making triangles.



Turn and P10, turn K9, S1, K1 psso turn and purl back

Continue this way until you have incorporated all 10 stitches from the first pass triangle. Congratulations - you've made your first block!

Pick up 10 more stitches and continue across row until final 10 stitches and proceed as follows:

P2tog, p8, turn

K9, turn

P2tog, P7, turn

K8

Continue in this way, purling two together at the beginning of the row and having one stitch less with each dec row. When you have one stitch left, turn and slip stitch onto left needle.

This is what you should have now:



Pass 3 - Just blocks

Cut your second colour and join your third colour. This is your second row of blocks and this one doesn't need any side triangles - just blocks.

P1, Pick up and purl 9 stitches, turn K10, turn

P9, P2tog, turn

K10 turn

Continue like this until you have worked all 10 stitches across the row from the block below. After the last P9, P2tog, do not turn. Pick up and purl another 10 stitches and work that block (the second one) and continue to the end of the row.



Repeat the second and third passes for the desired length.

NB. Optional - Make a large buttonhole for the car seat strap. Buttonhole: Cast off 8st 1st row and cast 8st on 2nd row.

Last Pass - Finishing

To end, you will need triangles and your last row of blocks needs to be a second pass row.

With one stitch on the needle, P1

Pick up and purl 9 stitches along the side of the block below, turn K10

P2tog, K7, P2 tog, turn

K9

Continue like this, purling 2 together at the beginning and the end of the row and having one less stitch on each dec. row, until you K2:

Turn and P1, P2tog, turn

K2, turn

P3tog

There is one stitch left. Pick up and purl 9 stitches as before and proceed with the second and third triangles etc. When you have one stitch left at the other side of the fabric, end off.



To finish:

Pick up stitches around the outside edges (circular needle or 1 edge at a time)

Approx. 110 st on side edges and 55 st on end edges.

Knit as many rows as required remembering to increase 1st at the corners on each row so the corners do not pull. Cast off.

Sew corner edges together, and neaten any ends. Wash and block.



Spin a worsted yarn

Fractal Spinning, *an Adventure*

BY STEFAN MOBERG, STOCKHOLM, SWEDEN

Fractal spinning is a way to control the colour of hand painted top or roving in a way that creates subtle self-stripping yarn.

Dividing things in two is something that must have been fascinating to humans for a long time. To take something and split it down the middle and make two pieces, each one half the size of the original. This could apply to anything: a stick, food, a piece of leather – anything! No wonder that it eventually found its way into the textile world.

The term "fractal stripe" first turned up in an article by Janel Laidman in the 2007 summer edition of Spin-Off magazine and fractal spinning has since then been very popular amongst hand spinners all over the world. Fractal spun yarns create stripes in a way where the colours blend into each other instead of there being a sudden change from one colour to another.

Fractals, named by mathematician Benoit Mandelbrot in 1975, appear in nature, in everything from pineapples to trees, ice crystals and even broccoli! Basically, it's a pattern that looks the same no matter if it's in a large or small scale. Fractals are complex, yet stem from simple equations. I am by no means a mathematician and there are a lot of people out there who can explain this way better than I can, but let's imagine a fractal "tree": it starts out with one trunk, then splits into two smaller trunks (only we usually call them branches instead of trunks), which then splits into four smaller branches, which then splits into eight even smaller branches and so on. This is the general idea and as complex as we need to go in order to understand the principles of fractal spinning.



Roving dyed in blue, brown and pink

So how does one go about it? Well, let's start off with a piece of dyed roving. It needs to be dyed in relatively distinct parts, so that the colours aren't too blended to begin with. As an introduction to fractal spinning, I like to start my students out with a piece of roving dyed in three separate sections. Let's pick blue, brown and pink as an example:



We then split the roving down the middle, lengthwise, to get two pieces, each one 50% of the original piece:



After this step, you take one of your two pieces and spin it. It's important to spin worsted, since you don't want the colours to mix. I like to use a short forward draw, but any worsted technique that you're comfortable with will do. You then put on an empty bobbin on your spinning wheel and here's where the magic happens – you then split your second piece in two (or more, as we'll come to later) and spin them on the new bobbin, after each other, making sure you keep the colours in the same order as for the first single you spun (i.e. if you spun the first piece in the order blue/brown/pink you should spin the two smaller pieces in the same order, one after the other – blue/brown/pink/blue/brown/pink).

This will give you one thread that has three long colour sections and one thread that has six short (about half as short as the long one) colour sections:



When plying them together you get a yarn where the colours

blend except for at the beginning and at the end.

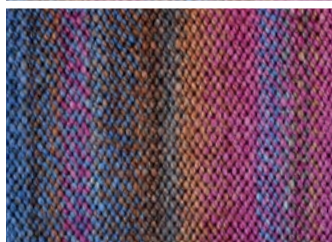
This is the standard fractal spinning I teach at workshops and the simplest way of working with the technique. However, let's take it further! What happens when you vary the amount of times you divide that second piece of roving?

For this article, I've dyed all the pieces of roving in the exact same way. Blue, brown and pink. I've then made different yarns with them.

Yarn No. 1 consists of one single spun from a 50% piece of the roving and one single spun from two 25% pieces. In mathematical terms one could say that this yarn is spun according to: $x/2 + (x/4 + x/4)$



Yarn No. 2 consists of one single spun from a 50% piece of the roving and one single spun from three 16.6% pieces. In mathematical terms: $x/2 + (x/6 + x/6 + x/6)$



Yarn No. 3 consists of one single spun from a 50% piece of the roving and one single spun from four 12.5% pieces. In mathematical terms: $x/2 + (x/8 + x/8 + x/8 + x/8)$



As you can see in the woven samples the colours blend more and more the more times you divide your second piece, and your stripes become shorter and shorter.

For a fractal spinning adventure in multiple ply yarns, I've ventured into the 3-plies. This is a more complex system and gives you more ways of varying the yarn. I've chosen two true 3-ply yarns and one Navajo-plied yarn (which I wouldn't consider a true 3-ply yarn since it's all made from one single thread).

Yarn No. 1b consists of one single spun from a 33.33% piece of the roving, one thread spun from two 16.6% pieces and one thread spun from three 11.1% pieces. In mathematical terms: $x/3 + (x/6 + x/6) + (x/9 + x/9 + x/9)$



Yarn No. 2b consists of one single spun from a 33.33% piece of the roving, one thread from two 16.6% pieces and four 8.3% pieces. In mathematical terms: $x/3 + (x/6 + x/6) + (x/12 + x/12 + x/12 + x/12)$



Yarn No. 3b is a Navajo-plied yarn made from a single that was spun from a 50% piece of roving, then a 25% piece, a 12.5% piece, a 6.25% piece and a 3.125% piece, then plied back on itself. Not taking the plying into consideration, this could be expressed in mathematical terms as: $x/2 + x/4 + x/8 + x/16 + x/32$. This technique was inspired by an article written by Benjamin Krudwig in 2015.



I'd also like to encourage you to experiment with more factors than just colour and number of plies – try experimenting with volume! A 3-ply yarn using singles spun in three different diameters (100%, 50% and 25% for example) could be quite interesting!



Stefan

Good luck and happy spinning!
Note: All the pieces described in percentages are approximate and not to be taken literally! Don't feel bad because you can't pick exactly 16.6% of a piece of roving – nobody can! It's just a figure to guide you.

Editor's note

This article featured in Issue 29 of *The Wheel*. Stefan also featured in Issue 28 of *The Wheel* where he encouraged us to use our hand spun in our weaving to create a very personal cloth.

Stefan, as well as being an award-winning spinner and weaver, also teaches classes in spinning and weaving at Gudruns Ullbod, the Swedish Ashford distributor.



Custom Lacings the Inkle Way

BY NICOLE KRAUTHÖFER, BERLIN, GERMANY

Frustrated with shoe and boot laces where the colour or material doesn't match, Nicole began weaving her own.

I wear my hand woven laces with almost every shoe that needs them - from gumboots to my red winter shoes. It is nice to be able to determine the colour and the pattern itself, and adapt to the shoe or the season.

You will need:

Loom: Inkle Loom

Warp: Ashford Cotton 10/2 (100% Mercerised Cotton 200gm, Ne 10/2; 1696m/1854yds) Cedar Green and Celosia Orange

Weft: Ashford Cotton 10/2 (100% Mercerised Cotton 200gm, Ne 10/2; 1696m/1854yds) Celosia Orange

Here's how:

Total warp ends: 7 orange and 6 green, a total of 13

Total warp length: 2.8m (3yds)

Finished width: 5mm (¼in)

Finished length: 2 x 1.2m (4ft)

Warping

Using the instructions in the *Learn to Weave on the Inkle Loom* booklet or the tutorial www.ashford.co.nz/inkle-tutorial, warp the loom following the draft below.

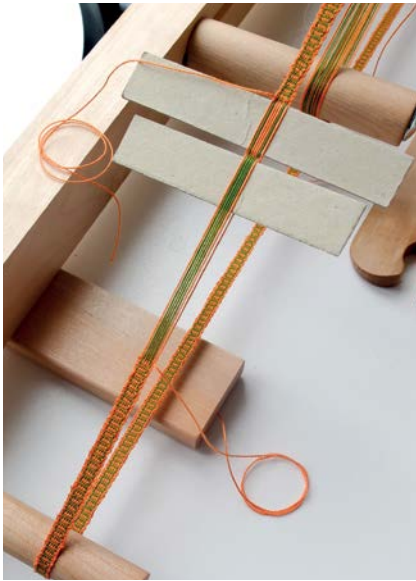
Shoelace draft
2 orange, 2 green, 1 orange, 1 green,
1 orange (centre), 1 green, 1 orange,
2 green, 2 orange



Weaving

Leave a 20-30cm (8-12ins) tail of weft thread and beating firmly, weave 1.2m (4ft) using the orange. Leave 30cm (12ins) of weft thread and cut.

Leave 20cm (8ins) of warp and weave the second shoelace like the first. Cut and remove from the loom.



Leave a 20-30cm (8-12ins) tail of the weft thread at the beginning and end of each shoelace.

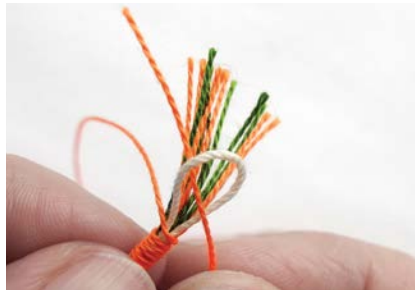
Finishing



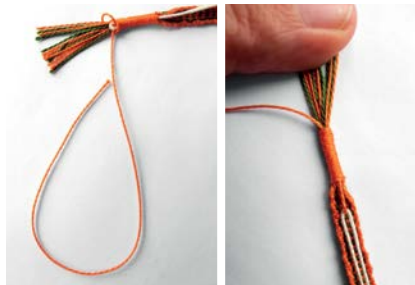
Put a loop of a contrasting thread in the centre on the end of the shoelace.



With the long, cut weft tail, wrap the last row of the woven shoelace and fringes tightly.



When you have wrapped approx. 1cm (1/3in), put the end of the weft thread through the loop of the contrast thread.



Pull the weft tail through the wrapped threads by pulling the contrast thread.



Pull tight.



Cut and repeat process for all ends.



Now dip the ends in textile glue. Do not remove any surplus. Allow the tips to dry thoroughly and cut off the fringes to create a nice end to feed through the shoe eyelet.



Nicole is colour-coordinated

Editor's note

I love Nicole's woven shoelaces, and her finishing techniques give a very smart and professional look. These fabulous laces first appeared in *The Wheel* in Issue 29. See more of Nicole's work on her blog krautline.blogspot.de



Plying

BY JO REEVE, WELLINGTON, NEW ZEALAND

Ply – it's such a little word but one with a big meaning.

A plied yarn is one in which multiple strands of spun singles are twisted together, usually in the opposite direction to that in which they were spun. There are many ways we can ply – two or more strands, novelty yarns, art yarns, cable yarns, and yarns with amazing colour effects, to name but a few. Plying is exciting – no matter which colours or textures are in the singles, or how they are plied, a beautiful new yarn is being created.

Why do we ply?

Balance – plying removes twist from each of the singles for a balanced yarn – one that does not twist upon itself.

Uniformity – plying evens out singles for a more uniform yarn. **Strength and durability** – plied yarns are stronger and more durable than singles – two, three, four or more singles can be plied. More strength is added to the yarn with the addition of each strand.

Loft – plied yarns are lighter than a single of the same thickness. **Texture** – create textured yarns from a subtle spiral to an art yarn, and everything in between.

Lustre – plying emphasises the sheen in fibres such as silk, suri alpaca, and Blue Faced Leicester.

How much twist?

There is no single answer to this as it depends on two important points – how much twist is in the singles, and the intended use of the plied yarn. The amount of twist in the singles is usually determined by the crimp in the raw fibre. Generally, the more crimps per centimetre the finer the fibre which means more twist is needed to hold them together. If you're not sure, make a short plying sample before you finish spinning your singles. Pull a 20cm (8ins) length of freshly-spun yarn off the bobbin and, keeping it under tension, fold it in half and let it ply back on itself.

Is it suitable for your intended project? If the yarn looks under-plied with gaps between the two singles, you will need one or two more treadles in the plying. If the yarn feels hard and plies back on itself, fewer plying twists are needed. Once you are happy with the sample, snip it off and use it to refer to while you are plying.

How to ply

Plying removes twist from the singles by spinning in the opposite direction to that of the singles. Assuming you have spun them Z twist (clockwise), you will be plying S twist, or anticlockwise. Working with a good rhythm is the key to evenly-plied yarn. Many spinners like to count the number of treadles before feeding the yarn onto the bobbin. Try this for your first efforts – as you become comfortable with the plying process you will find a natural rhythm and won't need to count.

Freshly spun singles are lively and full of energy. To prevent them twisting back on themselves while plying, place your lazy kate about 1m (3ft) behind your spinning chair. Attach the two singles to the leader and pinch lightly with your front hand. Holding your back hand close to your body and in line with the orifice, use one finger to separate the threads. For even plying, keep the singles taut. Treadle anticlockwise, letting the twist

run down the length of the two singles, sliding your front hand lightly along the plied yarn until your two hands meet, then pinch and feed the yarn into the orifice. Depending on your treadling speed, it will take 4-6 treadles for the twist to accumulate along the length of the singles. Adjust the tension if you need to so that the yarn is pulling on at a steady rate. The bobbin will fill up quickly so be sure to move your yarn to the next hook at regular intervals. All hand spun yarns, single or plied, benefit from resting to set the twist. I like to let my plied yarn rest on the bobbin for about 24 hours before washing. The way we ply can be the difference between a good yarn and a fantastic yarn. This applies not only to the aesthetics of the yarn, but whether it is fit for purpose. Some yarns are simply better suited to a particular knitting stitch. I made samples of single, two-ply and three-ply yarns to compare stocking stitch, cables and a simple lace pattern using plain and variegated yarns. They are a wonderful resource for planning future projects. For a fair comparison, my singles were spun worsted style with the same amount of twist and the same thickness from Ashford Corriedale sliver. I would love for you to be able to touch the samples but as that's not possible, I'll do my best to describe them. The results certainly are interesting.

PLAIN COLOUR YARNS

Singles

Stocking stitch: An unbalanced yarn with strong vertical lines and bias in the knitting.

Cables: Limp fabric and the cables do not 'stand up'.

Lace: There is some bias in the stocking stitch areas of the knitting, but not in the lace. The sample is soft and drapey, and the lace is open and well defined.

Two-ply

Stocking stitch: A balanced yarn with no bias in the knitting. The fabric is soft with good stitch definition.

Cables: Better stitch definition in the cables than the single yarn.

Lace: The lace holes are open but not as good as the single yarn.

Three-ply

Stocking stitch: A beautiful smooth, rounded yarn with stitches that sit snugly together and line up well. A very firm fabric.

Cables: The cables 'stand up'. Much better stitch definition than the two-ply yarn.

Lace: The fabric is firm with no drape and the lace area is not as open as the single yarn.

VARIEGATED YARNS

These days there are many beautiful colourways available for spinners. I wanted to see what would happen when I knitted the same samples using variegated yarns. They were spun from drum carded batts.

Singles

Stocking stitch: Clear, bright blocks of colour.

Cables: Limp fabric. The cables are flat and lost amongst the colour variation.

Lace: The lace holes are open and clear. The pattern is still obvious amongst the colour variation.

Two-ply

Stocking stitch: Bright, clear colours.

Cables: Good stitch definition in the cables but some depth lost in the colour variations.

Lace: The lace holes are open and the patterning is still clear but not as good as the single yarn.

Three-ply

Stocking stitch: The colours are soft and subtle – not as bright as in the single and two-ply yarns.

Cables: Great stitch definition even with the variation in colours.

Lace: The rounded yarns 'fills' the lace holes which are less open than the single and two-ply yarns.



In conclusion:

Single yarns: Great for showing off colour in stocking stitch. I would not use a single yarn for cables. The fabrics are limp and the cables do not 'stand up'. This would be a beautiful yarn to use in an all-over lace pattern. It is lightweight, drapey, the lace holes are open and there is no problem with splitting plies during knitting.

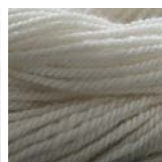
Two-ply: Also great for showing off colour variations in stocking stitch. An all-round yarn with good stitch definition for most knitting projects.

Three-ply: The ideal yarn for creating subtle colour variations. The perfect yarn for the best stitch definition in cables. A firm, hard-wearing fabric for outerwear that would have very little pilling.

Singles

Two-ply

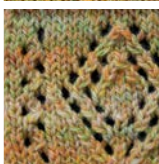
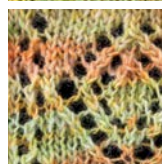
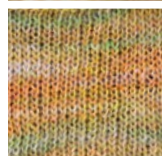
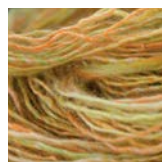
Three-ply



Singles

Two-ply

Three-ply



Editor's note

Jo is the author of the very popular *The Ashford Book of Carding* and *The Ashford Book of Hand Spinning*. She is also a member of the Professional Weavers Network of New Zealand and Creative Fibre New Zealand.

Jo has featured in several issues of *The Wheel* and this plying study appeared in Issue 29.

For full sized images visit www.ashford.co.nz/wheel35

BOOMERANG *Shawl*

BY NATASHA SILLS, HOUSTON, TEXAS, USA



Editor's note

Natasha Sills is a fibre artist who loves to knit, crochet, spin, dye, weave, and design. She is an Ashford dealer and sells her hand dyed yarn and spinning fibre online at www.GrittyKnits.com.

Her pattern design library is available on Ravelry.

This extremely popular shawl first featured in Issue 29 of *The Wheel*.

A versatile, easy-knit shawl that will wrap several times around the neck - perfect for displaying those variegated hand dyed, hand spun skeins.

I was travelling from the USA to New Zealand for a dealer retreat at Ashford headquarters when I came up with this cute but mindless plane project. It was easy to knit on the long flight even with frequent distractions. I've since made several Boomerangs of varying size and gauge; my favourite one is hand spun from a blend of fibre I obtained at the retreat. I always think of these as my Ashford Shawls. This pattern is quite versatile and works with any yarn. It is especially well suited to those odd skeins of hand spun that we all seem to make as beginners but don't quite know what to do with.

You will need:

Yarn: 100gms (3½ozs)

Needles: For a loose gauge use larger size needles than recommended for the yarn. I used about 330m (360yds) of worsted weight hand spun yarn and a size 6mm (US10, UK4) needle.

Note: This pattern can be made with any yarn, any gauge. Knit until you run out of yarn or until the shawl reaches the size you want.

Here's how:

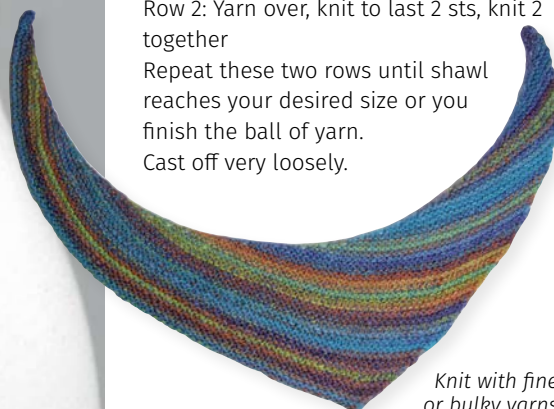
Cast on 4sts

Row 1: Knit to last stitch, yarn over, knit into the front and back of the last stitch

Row 2: Yarn over, knit to last 2 sts, knit 2 together

Repeat these two rows until shawl reaches your desired size or you finish the ball of yarn.

Cast off very loosely.



Knit with fine or bulky yarns

Twelve-week-old Samuel warm and comfortable in his cache coeur, with his mother, Teresa

Cache Coeur for Baby

BY PATRICIA ARROTIN, SAINTE JUSTINE, CANADA

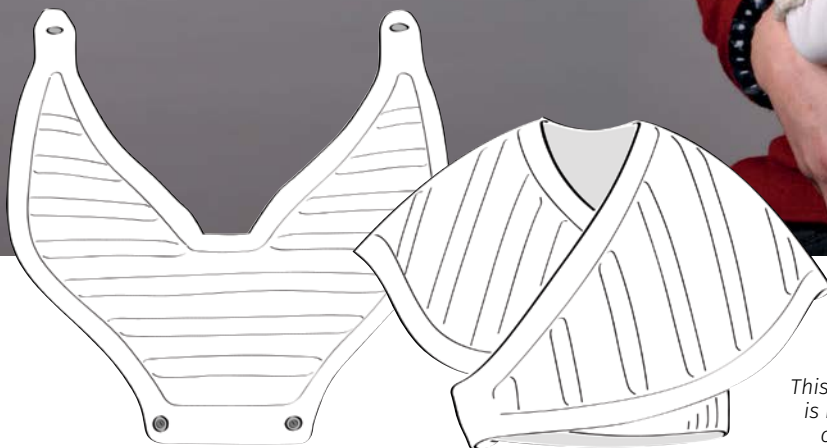
This little vest crosses at the heart (coeur) and is perfect for keeping baby warm.

You will need:

Yarn: 145m (158yds) of very fine 3ply hand spun wool.

Needles 3mm (US2.5, UK11)

Buttons: 2 x 10mm



This garment is knitted in one piece.

Here's how:

Beginning at the bottom of the back, cast on 35 stitches and work 16 rows in garter stitch (every row knit).

Continue knitting the pattern as below, but beginning every row with knit 5, pattern to last 5 stitches, increase 1, knit 5.

Pattern: (total of 9 rows)

Row 1: Purl

Row 2: Knit

Row 3: Purl

Knit 6 rows

Continue in this pattern and increasing at end of every row until 107 stitches (8 complete pattern sets will have been worked — you will end with row 9 = knit row).

Next Row: Knit 5, purl 45 stitches, (put these 50 stitches on to a holder), cast off

following 7 stitches and continuing on last 50 stitches, purl 45, knit 5.

Front (s): Continuing with pattern, and beginning and ending with the knit 5 stitches, decrease 1 stitch on the collar (inside) edge on every alternate row, until 11 stitches remain (78 rows worked). Garter stitch 16 rows.

Buttonhole Row: Knit 4, cast off 3, knit to end.

Next Row: Cast on 3 stitches in middle of row. (11 stitches)

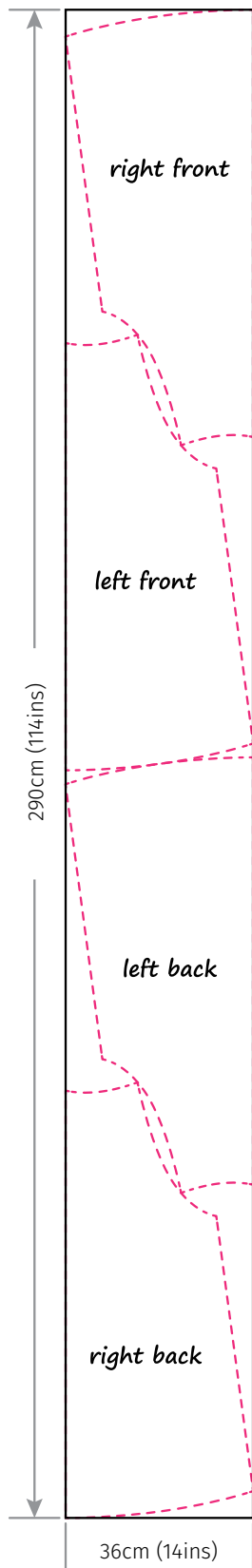
Knit 6 rows, knitting last 2 stitches together at end of every row, cast off remaining 5 stitches.

Work other front reversing all shaping. Finish: Wash the garment; sew the two buttons on to the bottom of back.



Editor's note

Patricia, an Ashford dealer in St Monique, Quebec, Canada is a spinning teacher and shearer too, of sheep, goats, llamas and alpacas. This pattern has been very popular since it first featured in *The Wheel* in 2007.



Denim Blue Dress

BY SARAH HOWARD AND ELISABETH KENDRICK, CLACTON-ON-SEA, UK

Strong blues, denim fabric and occasional blue and white floats give this dress a cool, fresh feel. Sarah and Elisabeth both love making clothes from their hand woven fabrics woven on their rigid heddle looms. This dress in cotton has become a summer favourite.

You will need:

Loom: 50cm (20ins) or wider rigid heddle
Reed: 40/10cm (10dpi)

Warp yarn: Denim organic cotton, 4 ply.

I used Debbie Bliss Eco Baby French Navy, 100% cotton, (10wpc/24wpi; 50g/125m) 3 balls; Universal Yarn Bamboo Pop, 50% bamboo 50% cotton, Midnight Blue, 100g (3.5oz), 266m (290yds), 1 ball; Rico Design Fashion Cotton Mouline DK, 75% cotton, 25% acrylic, (6wpc/15wpi; 50g/100m) blue (006) 1 ball

Weft yarn: Blue Sky Alpaca Skinny cotton DK 100% cotton, (137m/ 149yds; 65g net) Cobalt, 5 balls; Rico Design Fashion Cotton Mouline DK, 75% cotton, 25% acrylic, (50g/ 100m) blue (006) 1 ball for floats

Other: Commercial denim fabric 1m (1yd), Iron-On Woven Interfacing.

I use Stayflex 50cm (20ins), matching thread

Size: UK 12-14, USA 10-12, Continental 40-42. For other sizes adjust warp width to fit.

Here's how:

Total warp ends: 160

Total warp length: 340cm (134ins)

Finished width: 36cm (14ins)



Sarah wove the fabric for her dress on her Knitters Loom



Randomly placed blue and white accents

Warping

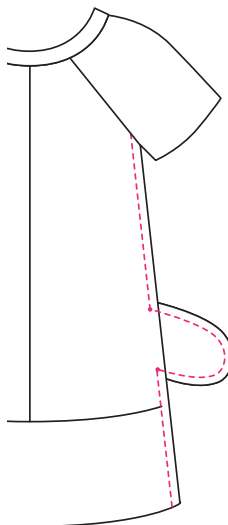
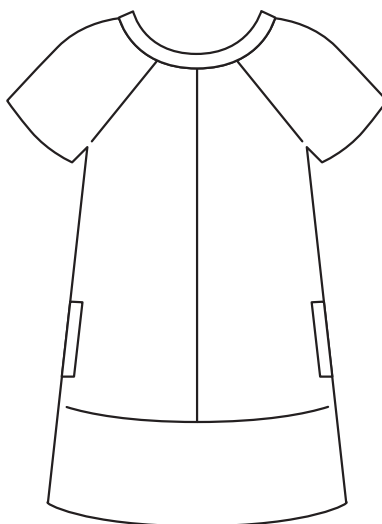
Warp the centre 40cm (16ins) section of the reed using the denim cotton with random slots of the other yarns.

Weaving

Plain weave complete length of the warp using the dark blue cotton. Tuck short lengths of the blue and white yarn into the weft as you weave.

Finishing

1. Remove from the loom and secure the ends with a zigzag stitch.
2. Give the fabric a gentle hand wash and line dry on a fine, windy day.
3. When still a little damp press with a warm steam iron.
4. Place the pattern (make your own pattern based on our illustration or available from us at www.etsy.com/uk/shop/GetWeaving) on the fabric, mark and cut.
5. Put strips of iron-on interfacing onto all of the cut edges on the wrong side of the fabric to stop them fraying. Overlock or zigzag over the raw edges.
6. Sew pieces together lengthwise with right sides together and a 1.5cm (5/8in seam).
7. Open the seam and press flat on both sides.
8. Use the denim fabric for the hem, raglan sleeves, pockets, and neckband to create a strong, textured contrast.
9. Stitch pockets into the side seams.



10. Use the reverse side of the denim for the neck binding and leave the raw edge showing on the right side.



Editor's note

This project appears in Sarah and Elisabeth's inspirational book *Get Weaving* that features a lovely collection of clothing made from cloth woven on a rigid heddle loom.

Soft cover, 48 pages,
ISBN 978-1-907938-73-3.

They are also creating new, full-size patterns for all their garments. The patterns and the book *Get Weaving* are available from www.etsy.com/uk/shop/GetWeaving

Sarah also has started a YouTube channel.

See www.youtube.com/@getweaving8459

Dye-Weave

Multi-way Wrap

BY ELIZABETH ASHFORD,
ASHBURTON, NEW ZEALAND

A colourful variation to a wardrobe classic.

Woven in our 4ply wool yarn that I had dyed I created a comfortable, versatile wrap that can be worn in many ways.

Editor's note

To see how to make the buttonholes for this versatile wrap go to www.ashford.co.nz/wheel35

You will need:

Loom: 60cm (24ins) or wider rigid heddle loom
Reed: 50/10cm (12.5dpi)
Warping frame
Warp and weft yarn: Ashford 4ply (100% wool; 400m/440yds per 100gm) x 500gm, Natural undyed
Ashford dyes 10gms (1/3oz) each of Coal, Sapphire, Fuchsia and Gold
Dyeing Equipment: Four 1 litre (13/4pt) containers, five syringes, plastic cling film, measuring spoons, paint brush, rubber gloves, bucket, stirrers, microwave (used only for dyeing), jars, white vinegar
Other: Buttons

Here's how:

Total warp ends: 298
Total warp length: 2m (61/2ft) including 20cm (8ins) for creating the zig zag pattern
Finished width: 58.5cm (23ins)

Dyeing

1. Wind warp onto a warping frame. One warp end will be from the start peg to the end peg. Make a threading cross only.
2. Once wound on, secure the warp at the start and the end with tight knots. (So the threads don't move. You will cut here later.) Secure the threading cross with a loose thread. Put two or three "no. 8" ties loosely around warp at intervals. (If they are tight the dye won't get into warp.)
3. Wind the weft.
4. Soak the warp and weft in a bucket of warm water with 1/2 teaspoon of dishwashing detergent for 30 minutes.
5. In a litre container mix 10gm (1/3oz) dye powder with sufficient hot water to dissolve. Add 150ml (5/4 flozs) of white vinegar. Fill the container with cold water. Do this for all four colours.
6. Warp colours. I wanted three autumn colours for the warp. Using the syringes add the correct amount of the dye solutions into a jar to create the new colour:
- Gold by mixing 1ml of Sapphire, 2ml of

Fuchsia and 60ml of Gold

- Dark Brown by mixing 2ml of Coal, 10ml of Sapphire, 20ml of Fuchsia and 40ml of Gold

- Red Brown by mixing 5ml of Coal, 30ml of Fuchsia and 30ml of Gold

7. Weft colour. I took some of the red brown colour and diluted it by half with water.
8. Place cling film onto a flat surface. Ensure you have enough wrap to cover the yarn. Squeeze out excess water and lay the warp yarns onto the cling film.
9. Using your brush, paint the yarn in 15cm (6ins) sections with the dye liquor from the jars. Ensure the yarn is well covered with the dyes. Wearing gloves, use your hands to push the dye into the yarns and push the colours together.
10. Repeat the process with the weft yarn using the diluted dye liquor.
11. Wrap the yarn into a parcel by folding the sides and then the ends of the cling film.
12. Place into a microwave and microwave on high for 1-3 minutes. Check the dyes are fully absorbed (exhausted).
13. Allow to cool, remove from wrap, rinse and dry.

Weaving

1. Once the warp is dry take to the loom. Place warp sticks or shuttles through the threading cross and place the warp in front of the reed and spread out the cross. Tie a piece of scrap yarn around the warp about 30cm (12ins) from the threading cross – to stop the threads moving. See diagram 1. Cut through the knot and end of the warp threads. Start on one side and pulling one end from the treading cross at a time, thread an end through each eye and slot from the front to the back of the loom.
2. Take out the shuttles (or cross sticks) and pull the warp straight.

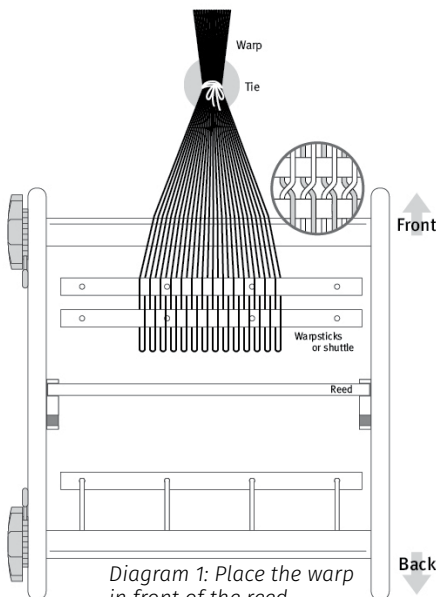


Diagram 1: Place the warp in front of the reed

Diagram 2: Knot the warp in small increments up and down to create a zig zag pattern



Thread from the front to the back through each eye and slot.

3. At the back of the loom take a small group of ends and tie a knot. Knot the next group a little further up the warp. Stagger your knots up 10-12cm (4-5ins) and down. This will create the pattern in your warp. Repeat across the width of the loom. See diagram 2. Trim the knots.
4. Undo the ties on the length of the warp and pull the warp from the front so all knots are against the reed. Leash on the warp to the back warp stick as normal.
5. Roll the warp onto back roller, place a piece of cardboard wide enough to cover the knots then continue with cardboard warp sticks. **WATCH OUT** - your warp ends are different lengths!! Make sure you don't wind it on the back roller too far.

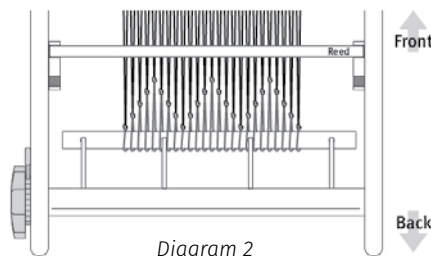


Diagram 2

6. Tie knots on the front and trim excess and leash on as normal.
7. Weave plain weave throughout – beat very gently.

Finishing

1. Wash, block, and press.
2. Sew buttons as shown in the diagram.

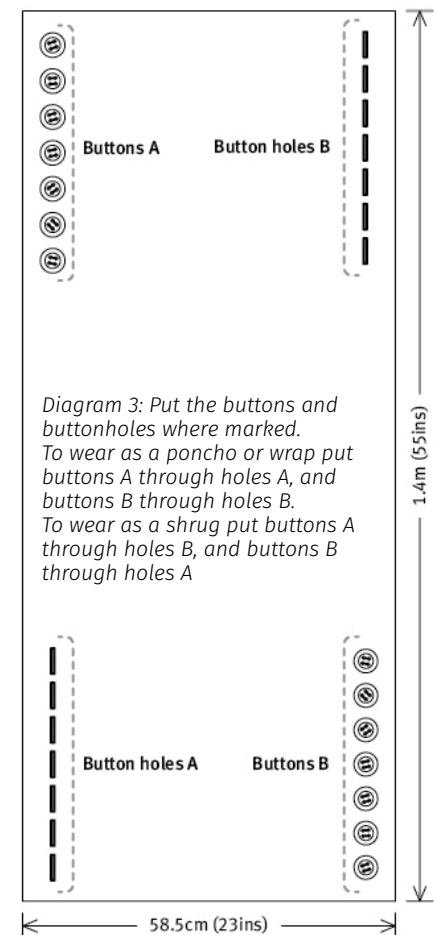


Diagram 3: Put the buttons and buttonholes where marked. To wear as a poncho or wrap put buttons A through holes A, and buttons B through holes B. To wear as a shrug put buttons A through holes B, and buttons B through holes A



Product news

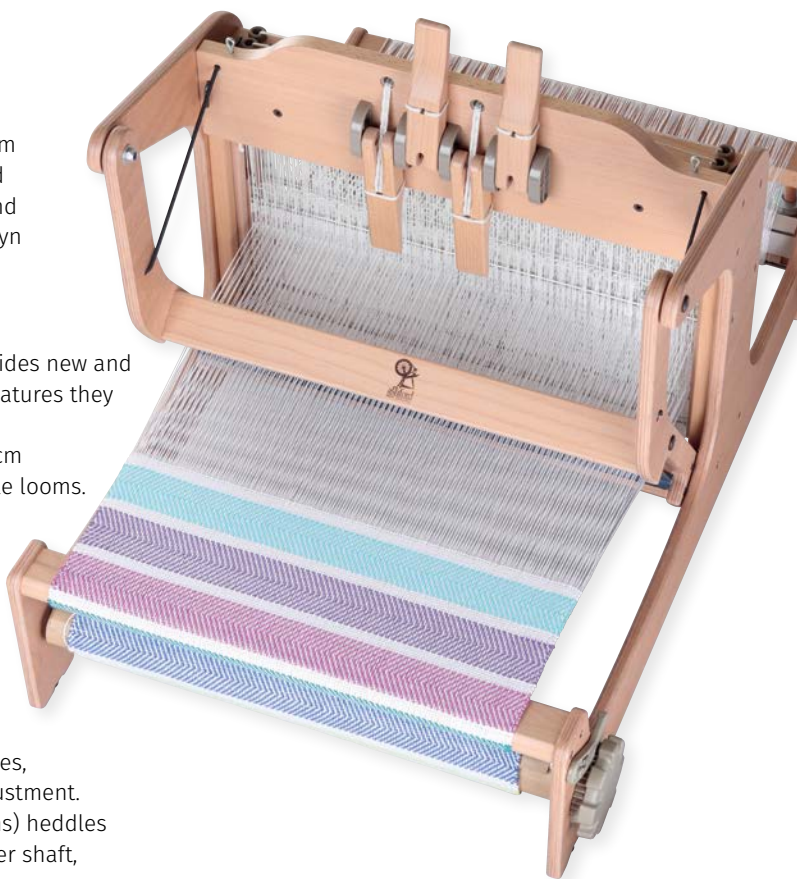
Brooklyn Four Shaft Loom

Our latest multi-shaft table loom - the Brooklyn Four Shaft Loom - has been designed to be an economic stepping-stone for rigid heddle weavers who are ready to expand their weaving skills and explore the wonderful world of multi-shaft weaving. The Brooklyn loom has been designed to be the ideal classroom loom. It makes weaving multi-shaft patterns simple and easy.



The Brooklyn Four Shaft Loom provides new and experienced weavers with all the features they need to weave amazing fabric.

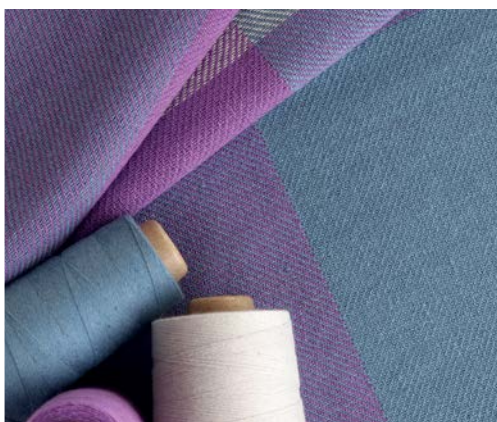
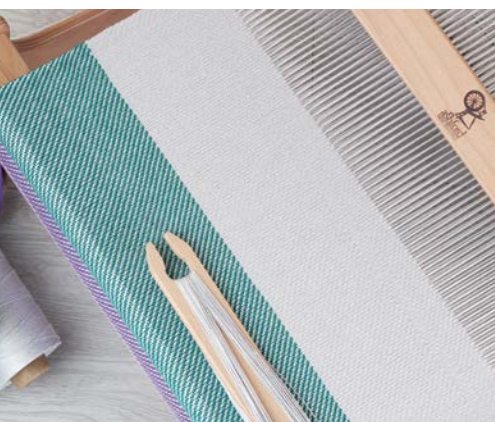
- Large beam to beam depth of 73cm (28½ins) the same as all our table looms.
- Smooth, quiet overhead beater with auto bounce-back for even beating at the fell.
- Generous rising shed.
- Smooth action levers for light and easy pattern changes.
- Texsolv cord lifts shafts evenly from both sides through frictionless nylon loom cord guides, and allows easy shaft height adjustment.
- A total of 320 Texsolv 22cm (8½ins) heddles are supplied giving 80 heddles per shaft, enough for a balanced 20epi weave.
- Stainless steel 10dpi reed.
- Beater will accept over width reeds and can be locked for warping.
- Strong 40 teeth nylon ratchets, handles and clicker pawls allow comfortable warp tension and control.
- Rubber feet to keep your loom from moving when weaving.
- Kit includes 2 shuttles, 5 cross/warp sticks, 10 cardboard warp separating sticks, threading hook and a full step-by-step colour assembly, warping and weaving instruction booklet.



- The loom is made using strong beech hardwood with ply sides that combine to make the Brooklyn Four Shaft Loom robust, light and easy to move.
- Quick and easy to assemble.
- Choose to leave natural or finish with Ashford Finishing Wax Polish, oil, lacquer or decorate to your preference.

Optional accessories:

Stainless steel 6, 8, 10, 12 and 16dpi reeds, additional Texsolv Heddles, Raddle Kit, Warping Frames, Warping Mill, Boat Shuttles and bobbins.



New Felting Kits

HALLOWEEN

Make six spooky little decorations - Pumpkin, Witches Hat, Bat, Skull, Spider and Ghost. Everything included: Ashford Corriedale sliver, felting foam, 2 felting needles, chenille sticks and step-by-step colour instructions.



OWL

This kit is a super cute, little sleepy owl. Everything included: Ashford Corriedale sliver, felting foam, felting needle and step-by-step colour instructions. Include the owl in your Ashford felted menagerie - the Beagle, Butterflies, Kiwi, Panda, Penguins, Pukeko, Sheep, Seal and Tui.

Cottolin

A lovely blend of 70% cotton 30% linen. The combined softness of cotton and crispness of linen result in a woven fabric that is very versatile. This durable yarn can be substituted in any project requiring 8/2 cotton. Available in 18 vibrant modern colours, 200gm cones.



Traveller 3

The new Traveller 3 design is reminiscent of the original Traveller first made back in 1977. With some great new improvements for 2023, it is sure to be very popular. Listening to our customers is an important part of our product development process, the new Traveller 3 redesign was no exception.

- A beautiful, classic upright castle wheel.
- Aesthetically designed centralised flyer suitable for both left and right-hand spinners.
- Four speed single drive flyer with stretchy polycord drive band eliminates any flyer vibration and makes changing ratios a breeze.
- Ratios 5, 7, 9 and 14:1
- Sliding hook flyer with three 90mm (3½ins) large capacity bobbins as standard.

- Wooden handle threading hook with longer hook for easier threading.
- Convenient storage for threading hook.
- Scotch tension for simple, smooth accurate tension adjustment.
- Built-in lazy kate (that will also accommodate Jumbo bobbins).
- The 405mm (18ins) drive wheel is now heavier resulting in 20% more momentum which means even less effort required to treadle.
- Stainless steel ball bearings, polyurethane hinge and con rod joints, and double treadle for comfortable, balanced, and effortless treading.
- Quick and easy to assemble.
- Compact footprint.

Optional accessories:

Basic Jumbo Flyer, Sliding Hook Flyer Jumbo, Standard Flyer (wooden with hooks), and Quill Spindle.

Available from your local Ashford dealer ashford.co.nz/where-to-buy

Introducing the next generation Traveller 3

Available from your local
Ashford dealer now!



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WHEELS & LOOMS