

# HANDSPUN GALLERY OF Natural Dyes

**Editor's note:** Early this spring, we invited you to submit your naturally dyed swatches—we heard from many of you—and we selected eleven swatches to share with you. Visit [spinoffmagazine.com](http://spinoffmagazine.com) often to find more calls for entries as we'll be posting calls for upcoming events frequently. If you don't use the Internet, send a self-addressed stamped envelope or SASE to Calls for Entries, *Spin-Off* magazine, Interweave, 201 E. 4th St., Loveland, CO 80537-5655 to receive guidelines.



## Wheat Fields

Melanie Smith of Boise, Idaho, took a class a few years ago in which the teacher talked about natural dyes and all the places where they can be found. It got her thinking about her unusual plum tree—when the fruit is ripe, it is green on the outside and deep red on the inside. While she was pruning the tree in February, she decided to keep the bark to try dyeing with it. The experiment, which was her first real foray into natural dyeing, inspired so many ideas for future projects that she's excited to try more.

## DYEING

Melanie cut the bark into small pieces and filled her dyepot with it. She covered it with water and let it sit for a month to let the natural sugars rise to the outside of the bark. She added rubbing alcohol to the bark and let it sit for another three weeks. After her dye had time to extract, she drained off the liquid into a larger dyepot and added 2 gallons of water to make the dyebath. She added her premordanted Polypay roving to the bath and let it simmer for about an hour and then let the dyebath cool overnight. When the roving came out of the bath, it was a beautiful wheat hue with just a hint of pink.

## SPINNING

Melanie wanted to spin a light and soft yarn because Polypay has such great bounce. She decided to spin American long draw and make a two-ply laceweight yarn.

## Project Notes

**Dye:** Plum bark.

**Mordant:** Alum.

**Fiber:** 2 oz Polypay roving.

**Preparation:** Predrafted.

**Drafting method:** American long draw.

**Wheel:** Schacht Matchless.

**Wheel system:** Double drive.

**Ratio (singles/plying):** 15:1 (both).

**Singles direction spun:** Z.

**Singles wraps per inch:** 40.

**Twist angle:** 15°.

**Number of plies:** 2.

**Plied direction spun:** S.

**Plied twists per inch:** 3.

**Plied wraps per inch:** 21.

**Total yardage:** 164.

**Yards per pound:** 1,312.

**Yarn classification:** Light fingering weight.

**Yardage used:** 75.

**Needles:** U.S. size 4.

**Gauge:** 5 sts and 9 rows = 1".

**Stitch pattern:** Leaf Panel from *Harmony Guides: Lace & Eyelets* (Loveland, Colorado: Interweave, 2007).

## Project Notes



## Pink Copper

Lynn Voortman of Hamilton, Ontario, Canada, worked on this piece to improve her results with natural dyes on cellulose fibers. Knowing that Tencel (lyocell) is an environmentally friendly fiber, she was very interested in working with it. Lynn used a three-mordant process (tannic acid, alum, tannic acid) and dyed it in a mix of Blood Red (madder and soapwort) and Mango Yellow (tumeric, pomegranate, and tesu) fermented dye extract; she thinks the Tencel mostly picked up the cochineal because on wool or silk, the same dyes would have yielded a shade of orange.

### DYEING

Lynn combined two dye extracts—Mango Yellow at 15 percent weight of goods and Blood Red at 10 percent weight of goods; the red was a much more concentrated dye so the dyepot was mainly red.

Lynn mordanted the fiber three times. The steps were tannic acid (8 percent), then alum mordant (10 percent), and then tannic acid again, boiling the fiber each time for about 20 minutes and then allowing the fiber to soak for 30 minutes. Lynn added soda ash to the mordant and dyebaths to make the water alkaline (unlike for wool and silk that dye in an acidic bath).

The dyebath was prepared by mixing the dye extracts together with some hot water to make a paste, adding the extracts to a preheated pot of water, and simmering for 30 minutes. Lynn added the yarn and simmered another 30 minutes and then left it in the dyepot overnight. She rinsed and washed the yarn with soap and hung it to dry.

### SPINNING

Lynn purchased the Tencel fiber as an undyed top from Copper Moose ([www.coppermoose.com](http://www.coppermoose.com)). It is a very

**Dyes:** Cochineal and Mango Yellow fermented dye extracts imported from Sam Vegetable Colours (India) by Blue Castle Fiber Arts.

**Mordant:** Tannic acid and alum.

**Fiber:** 5 oz Tencel top.

**Preparation:** Top split and predrafted.

**Drafting method:** Long draw.

**Wheel:** Ashford Joy.

**Wheel system:** Scotch tension.

**Ratio (singles/plying):** 8:1 (both).

**Singles direction spun:** Z.

**Singles twists per inch:** 3.

**Singles wraps per inch:** 15.

**Twist angle:** 10°.

**Number of plies:** 2.

**Plied direction spun:** S.

**Plied twists per inch:** 2.

**Plied wraps per inch:** 10.

**Total yardage:** 90.

**Yards per pound:** 288.

**Yarn classification:** Bulky.

**Yardage used:** 40.

**Needles:** U.S. size 6.

**Gauge:** 20 sts and 22 rows = 4".

**Stitch pattern:** Elm Grain from *Mon Tricot | 100 Stitches Patterns: Knitting and Crochet* (New York: Mon Tricot, 1978).

smooth and slippery fiber but in long strands, it is not difficult to spin. It also holds the twist quite well. She predrafted the undyed fiber and spun a fine to medium Z-twist singles, then plied S. She did not block the yarn until after dyeing and washing.





## SPINNING

Lynn loosened and pulled apart the indigo-dyed roving and put it through the drumcarder, alternating with black alpaca fiber in about a one-to-one ratio. She ran the fiber through the carder two more times to blend the colors really well. Lynn predrafted the batt into a thin roving ready for spinning and spun a singles using a long draw. She skeined the yarn, soaked it in hot water, and then hung it to dry with a weight in the loop.

## Midnight Blue Castle

Lynn Voortman of Hamilton, Ontario, Canada, made a beautiful dark blue piece by blending a fairly light indigo-dyed wool with natural black alpaca fiber. She likes to recard roving after dyeing to make it easier to spin because it tends to get a little bit felted in the dyeing process.

### DYEING

Lynn mordanted the wool roving in alum using a cold method to minimize felting: the fiber was soaked in a cold-water solution of alum (10 to 15 percent weight of goods) for one to two weeks. She prepared the dyebath with indigo dye extract and dyed the wool roving a light to medium blue using about 30 percent extract to the weight of goods. Lynn mixed the dye in hot water to make a paste and then added it to the dyepot to simmer for 30 minutes; then she allowed the dyebath to cool to room temperature. Lynn added the

## Project Notes

**Dye:** Indigo blue fermented dye extract imported from Sam Vegetable Colours (India) by Blue Castle Fiber Arts.

**Mordant:** Alum.

**Fiber:** 3.5 oz Corriedale wool roving and undyed black alpaca.

**Preparation:** Blended on a Strauch drumcarder; then predrafted into narrower roving for spinning.

**Drafting method:** Long draw.

**Wheel:** Ashford Joy.

**Wheel system:** Scotch tension.

**Ratio (singles/plying):** 8:1 (both).

**Singles direction spun:** Z.

**Singles twists per inch:** 4 to 5.

**Singles wraps per inch:** 13.

**Twist angle:** 20°.

**Total yardage:** 172.

**Yards per pound:** 786.

**Yarn classification:** Bulky.

**Yardage used:** 53.

**Needles:** U.S. size 4.

**Gauge:** 18 sts and 26 rows = 4".

**Stitch pattern:** Tilting Ladder from *A Second Treasury of Knitting Patterns* by Barbara G. Walker (Pittsville, Wisconsin: Schoolhouse Press, 1998).

wool roving to the dyebath and gently reheated the bath, holding it at a simmer for another 20 minutes. She let the dyebath cool and then removed the roving and let it sit overnight unrinsed to allow the dyes to set a little more. The next day, she gently rinsed and washed the fiber and then laid it out to dry.

## Purple Shell

Lynn Voortman of Hamilton, Ontario, Canada, originally intended to space-dye wool roving using Blood Red (madder and soapwort) and indigo, but she wasn't happy with the results. The hues were too light, so she decided to blend the colors on her drumcarder and was surprised at the beautiful mauve purple that resulted. She loves that blending the two colors creates an optical illusion; each fiber strand is either red or blue but when blended they are seen as purple.

### DYEING

Lynn dyed the wool roving using the same cold-mordant process she used for Midnight Blue Castle. She prepared one dyebath with Blood Red (5 percent weight of goods) and another with indigo (20 percent weight of goods). She premixed the dye extract in hot water to form a paste, added it to a pot of simmering hot water, cooked it for 30 minutes, and then cooled the pot to room temperature.

With the roving organized in large loops, Lynn dipped half of the length in the still-warm indigo dye bath and left it to soak overnight. She took the other end of the roving and placed it in the reheated red dye bath to soak overnight. Had she been planning to blend the two colors, she would have just divided the roving in two and placed them in separate dye baths. The next day, she gently

rinsed and washed the roving with mild soap and laid it out to dry.

### SPINNING

Because roving seems to get a bit compacted from dyeing no matter how carefully she handles it, Lynn finds that loosening up the fiber and recarding really makes spinning easier. She doesn't always recard because it's time con-

suming, but in this case, she wanted to completely blend the two colors anyway, so she put the fiber through the carder three times. She then predrafted the roving into a thinner pencil roving and spun a thick Z-twist singles using a long draw. She skeined the yarn, wetted it in hot water, and then hung it to dry with a weight in the bottom loop.



## Project Notes

**Dyes:** Indigo and Blood Red (madder and soapwort) imported from Sam Vegetable Colours (India) by Blue Castle Fiber Arts.

**Mordant:** Alum.

**Fiber:** 3.5 oz Corriedale wool roving.

**Preparation:** Carded on Strauch drumcarder to blend colors, then pre-drafted into pencil roving.

**Drafting method:** Long draw.

**Wheel:** Ashford Joy.

**Wheel system:** Scotch tension.

**Ratio:** 8:1.

**Singles direction spun:** Z.

**Singles twists per inch:** 4.

**Singles wraps per inch:** 14.

**Twist angle:** 20°.

**Total yardage:** 158.

**Yards per pound:** 722.

**Yarn classification:** Double knitting (DK).

**Yardage used:** 72.

**Needles:** U.S. size 2.5.

**Gauge:** 20 sts and 28 rows = 1".

**Stitch pattern:** Shell Stitch from *Mon Tricot 1100 Stitches Patterns: Knitting and Crochet* (New York: Mon Tricot, 1978).





## Handspun Navajo Churro

In May 2009, Joanna Taylor of Buffalo, Wyoming, received a scoured New Mexican Navajo Churro fleece and a Louet drumcarder from her cousin. Joanna carded the fleece into little batts and spun from strips torn off the batt on her Ashford Traditional wheel. Since she intended to make a rug from the wool, she didn't try to get rid of the guard hairs in the fleece. She dyed the two-ply yarn with several dye plants from her garden: Hopi dye sunflowers, Hopi red dye amaranths, and garden sage.

### DYEING

Starting with the amaranth, Joanna filled her dyebath (a 4-gallon canning

kettle) with leaves and tender stems as full as she could and then added 4 inches of water to cook the amaranth down. She strained out the vegetable matter and added 1 tablespoon alum and one teaspoon cream of tartar, heated the dyebath again, and then added the skein of wool that had been soaking for at least 30 minutes in hot water. Joanna brought the dyebath to a boil and held it at that temperature until the color was set (about an hour). She rinsed the skein several times when the dyebath had cooled to just hot in equally hot water from the tap. The skein was a beautiful gold-orange color. Joanna was careful not to shock the wool by changing water temperatures dramatically or stirring too vigorously as this can cause the wool to felt. Joanna only had about a quart of Hopi dye sunflower seeds, so

## Project Notes

**Dyes:** Hopi dye sunflower (seeds from [www.seedsofchange.com](http://www.seedsofchange.com)), Hopi red dye amaranth (grown from seeds from Pinetree Garden Seeds of New Gloucester, Maine), and garden sage.

**Mordant:** 3 oz of alum to 1 oz cream of tartar.

**Fiber:** 4 lbs Navajo Churro scoured fleece.

**Preparation:** Drumcarded batts.

**Drafting method:** Modified long draw.

**Wheel:** Ashford traditional.

**Wheel system:** Scotch tension.

**Ratio (singles/plying):** 6.5:1 (both).

**Singles direction spun:** Z.

**Singles wraps per inch:** 16.

**Twist angle:** 10°.

**Number of plies:** 2.

**Plied direction spun:** S.

**Plied twists per inch:** 4.

**Plied wraps per inch:** 9.

**Total yardage:** 2,600.

**Yards per pound:** 650.

**Yarn classification:** Bulky.

**Yardage used:** 96.

**Needles:** U.S. size 9.

**Gauge:** 3 sts and 5 rows = 1" of 3-stranded (with 2-ply yarn) garter stitch.

**Stitch pattern:** Garter stitch.

she dyed only two skeins of wool, getting a blue-gray hue. She was careful not to overcook the sunflower seeds because they'll turn to mush. After straining the seeds from the dyebath, Joanna added the same alum/cream of tartar mordant to the dyebath and repeated the process. Joanna followed the same steps for the sage with a nice yellow hue resulting. She found that a cooking pot of garden sage gives a very strong odor.

# Nutty Indigo

Kelly Knispel of Groton, South Dakota, considers Icelandic wools and adult mohair to be extremely hardy fibers, able to withstand wear and hold up to use for many years. She has raised Icelandic sheep and Angora goats for twelve years and has plenty of these fibers to use. She envisions making a shoulder bag or a vest with this yarn—an article of clothing or accessory that will be rigorously used. Kelly is active in many historical demonstrations, and her guild often demonstrates the process of natural dyeing. She dyed her fiber at one of these events.



## Project Notes

**Dye:** Black walnuts and indigo.

**Fiber:** 3 lbs of wool and mohair locks.

**Preparation:** Carded clouds.

**Drafting method:** Woolen.

**Wheel:** Mach II.

**Wheel system:** Bobbin drive.

**Ratio (singles/plying):** 5:1 (singles); 10:1 (plying).

**Singles direction spun:** Z.

**Singles twists per inch:** 6.

**Singles wraps per inch:** 11.

**Twist angle:** 25°.

**Number of plies:** 2.

**Plied direction spun:** S.

**Plied twists per inch:** 3.5.

**Plied wraps per inch:** 6.

**Total yardage:** 900.

**Yards per pound:** 300.

**Yarn classification:** Bulky.

**Yardage used:** 25.

**Needles:** U.S. size 3.

**Gauge:** 4 sts and 7 rows = 1".

**Stitch pattern:** Stockinette bordered with seed stitch.

## DYEING

Kelly collected black walnut hulls, dried them, and then soaked them for about three months before the dyeing event. Once she was ready to dye, she strained the black walnut liquor into an enamel canning kettle and set it over an outdoor fire to simmer. She allowed the liquor to boil for about an hour. In the meantime, she soaked the washed wool and mohair locks in water so they were well wetted before placing them in the dyebath. Black walnut is a substantive dye and needs no mordant to set the color, although alum can help to darken it. After allowing the black walnut dyebath to cool to about 150 degrees Fahrenheit, she placed the fibers in the dyebath and reheated it to let it simmer for another hour. Kelly let the fibers cool down in the dyebath, and once the depth of color was achieved, she lifted the wool and mohair locks from the dyebath, rinsed them carefully, and spread them out on a towel to dry.

Kelly used indigo to achieve her rich blue hue. She prepared the dyebath by heating 2 to 3 gallons of water to 120 degrees Fahrenheit. She then added her indigo stock solution carefully so as not to introduce oxygen into the dyebath

and let the dyebath rest for 30 minutes while maintaining the heat at 120 degrees. Kelly put the washed, wet fiber (soaked overnight) into the dyebath, slowly submerging it to avoid stirring up the dyebath and introducing oxygen. After 30 minutes, she lifted the locks out with a slotted spoon to allow the fibers to oxidize for 30 minutes. She repeated dipping and airing the goods until she reached the desired depth of the color. She rinsed the locks and spread them out to dry on a towel.

## CARDING

Kelly handblended the dyed wool and mohair locks, combining the indigo blues and walnut browns by mixing the fiber and colors into a nonhomogeneous arrangement. She wanted to maintain areas of solid blues and solid browns in the yarn yet blend the wool and mohair together. She then carded this blend at her industrial carding mill, Dakota Carding and Wool Company, recently purchased from Georgia Mommaerts of Quail Hill Carding. The commercial carding mill blends fibers and colors as it picks and cards a cloud ready for spinning or felting. The composition of this blend was 70% wool/ 30% mohair



and 60% indigo/40% black walnut.

## SPINNING

Kelly spun two-ply worsted-weight

yarn thinking of a vest or a bag, depending on the total yardage after spinning. She washed the skeins and hung them to air-dry to set the twist. (Kelly

Knispel is also known as biotayarns on [www.ravelry.com](http://www.ravelry.com) and [www.etsy.com](http://www.etsy.com).)



## Summer Cardigan

Shirley M. Lyster of Powell River, British Columbia, Canada, made this swatch to ensure that she had enough fiber to spin and knit a summer cardigan. She had spun the Shetland/Border Cheviot cross before and liked the feel of the yarn because it has a nice elasticity. Fingering weight seemed an appropriate weight yarn for the cardigan.

She picked some goldenrod flowers in Newfoundland, Canada, when she was there three years ago and dried them for dyeing, and she was thrilled to have a chance to use them finally. She likes the soft yellow hue the goldenrod flowers yield.

## DYEING

To start her dyebath, Shirley steeped 1.2 ounces of the goldenrod flowers in

warm water and then let them stand in the water for one week. Before dyeing, she simmered 0.7 ounce of yarn (contained in a mesh bag) in alum for an hour and let it soak overnight. The next morning, she squeezed out the excess water after removing it from the mordant and placed the yarn in the dyepot. Shirley added the dye liquor (including a few bits of plant materials), 1 tablespoon of vinegar (to assist color absorption), and enough water to cover the yarn. She heated the dyebath to a simmer and occasionally moved the mesh bag to encourage even dyeing. She held the dyebath at a simmer for 3 hours, then let it cool overnight. In the morning, after removing the goods she neutralized the dyebath with a teaspoon of baking soda before safely disposing of it. She washed and rinsed the yarn and then pressed the excess moisture into a

towel before hanging the skein to dry. After it was dried, she held it tensioned over a steaming pot to smooth out the crinkles, taking care not to burn her hands.

## Project Notes

**Dye:** 1.2 oz goldenrod flowers.

**Mordant:** Alum.

**Fiber:** 0.7 oz Shetland/Border Cheviot cross.

**Preparation:** Drumcarded roving.

**Drafting method:** Predrafted.

**Wheel:** Majacraft Little Gem.

**Wheel system:** Scotch tension.

**Ratio (singles/plying):** 5.9:1 (both).

**Singles direction spun:** Z.

**Singles twists per inch:** 6.

**Singles wraps per inch:** 31.

**Twist angle:** 21°.

**Number of plies:** 2.

**Plied direction spun:** S.

**Plied twists per inch:** 4.

**Plied wraps per inch:** 16.

**Total yardage:** 118.

**Yards per pound:** 2,700.

**Yarn classification:** Fingering weight.

**Yardage used:** 65½.

**Needles:** U.S. size 3.

**Gauge:** 8 sts and 8 rows = 1".

**Stitch pattern:** Snowdrop Lace from *The Harmony Guide to Knitting Stitches* (London: Lyric Books, 1983).

**Finishing:** Washed the swatch, blocked it, and then steamed it by holding a steaming iron over it.

# Golden Autumn Mitts

Linda Clutterbuck of Norridgewock, Maine, has been experimenting with natural dyes since taking a dyeing class with Harriet Boon last summer as part of the Ontario Handweavers and Spinners (OHS) spinning certificate program. She likes to blend both colors and fibers and was able to do both in

this exercise. Linda has also been trying to come up with the perfect mitt pattern. She found that using a smaller-sized needle after setting off the thumb stitches, putting a hem on both top and bottom of the mitt, as well as using k1, p1 rib for the palm make for a nice snug fit. She likes the diagonal line of the Estonian Star pattern to break the striping of the variegated yarn.

## DYEING

Linda mordanted 0.7 ounce each of Bluefaced Leicester, Wensleydale, and

mohair roving with alum and cream of tartar. After they dried, she carded them on her Strauch drumcarder and made four 0.5 ounce batts of the blended fibers. Meanwhile, she soaked 2 ounces of yellow onion skins in 2 gallons of water overnight, simmered them for an hour, and strained the onion skins out of the dye liquor. The next day, she added the wetted batts to the dye-stock and brought the dyebath to a simmer, holding it there for 1 hour. She removed three of the batts (now a nice yellow-gold hue) and placed the re-

## Project Notes

**Dyes:** Onion skins, iron.

**Mordant:** Alum and cream of tartar.

**Fiber:** 0.7 oz each Bluefaced Leicester; mohair; Wensleydale roving dyed olive green, yellow gold, and light yellow.

**Preparation:** Roving recarded into four .5 oz batts.

**Drafting method:** Long draw.

**Wheel:** Jensen 30-inch production wheel.

**Wheel system:** Double drive.

**Ratio (singles/plying):** 13.5:1 (singles); 14:1 (plying).

**Singles direction spun:** Z.

**Singles wraps per inch:** 24.

**Twist angle:** 30°.

**Number of plies:** 2.

**Plied direction spun:** S.

**Plied twists per inch:** 8.

**Plied wraps per inch:** 14.

**Total yardage:** 180.

**Yards per pound:** 1,440.

**Yarn classification:** Worsted weight.

**Yardage used:** 175.

**Needles:** U.S. sizes 2 and 3 double-pointed needles, 7".

**Gauge:** 7 sts and 8 rows in k1, p1 ribbing on U.S. size 3 dpn.

**Stitch pattern:** Mitt pattern with Estonian Star stitch adapted from a pattern from the Tsarina of Tsocks ([www.tsocksarina.com](http://www.tsocksarina.com)).





maining batt in an afterbath of water and ¼ teaspoon of iron to obtain a dark olive green hue. After the batts dried, Linda took one and blended it with an equal amount of the white fiber blend to create a light yellow hue.

## SPINNING

Linda blended the dyed batts on

her drumcarder using 1 ounce of yellow gold and 0.5 ounce each of dark olive green and light yellow. She stacked the batts (using a recommendation from Deb Menz's book, *Color in Spinning* (Interweave, 1998) medium, dark, light, medium and then rolled and elongated them into roving, creating ribbons of each color. After spinning the singles

long draw, she wound the singles on a ball winder and spun a two-ply yarn from the center-pull ball. She wound the two-ply yarn on a reel, tied it with figure-eight ties, and finished it by soaking it in warm water with Orvus Paste for a few hours. The dye did not bleed. She dried the skein by hanging it without weights.



## Twilight at the Seashore

Last fall, while reading Jenny Dean's excellent dye book *Wild Color* (Watson-Guptill, 1999), Jean Newsted of Comox, British Columbia, Canada, discovered that dark-colored hollyhock flowers can be used for dyeing without heat. Since she already had some dried black hollyhock flowers, she made a sample dyebath. One of her sample yarns was wool and the other was silk, and both were premordanted in alum. They dyed quite differently—the wool turned greenish gray and the silk turned purple. Jean wondered what would happen if she spun and dyed a yarn that was a blend of wool and silk. Happily, she found a roving that was a blend of 50 percent Merino and began to spin. Dyeing produced a lovely, subtle mauve with elusive greenish overtones, reminding her of the color of the sky, sea, and sand just after the sunset has faded away into twilight.

### Project Notes

**Dye:** 138 black hollyhock flowers from Jean's garden in Comox, British Columbia, on Vancouver Island.

**Mordant:** Alum and cream of tartar.

**Fiber:** 2 oz 50% wool, 50% silk.

**Preparation:** Prepared roving from Judy Maclean of Sweatermaker Yarns in Courtenay, British Columbia.

**Drafting method:** Modified short draw.

**Wheel:** Jensen Tina Victoria.

**Wheel system:** Double drive.

**Ratio (singles/plying):** 10:1 (both).

**Singles direction spun:** Z.

**Singles twists per inch:** 20.

**Singles wraps per inch:** 31.

**Twist angle:** 18°.

**Number of plies:** 2.

**Plied direction spun:** S.

**Plied twists per inch:** 10.

**Plied wraps per inch:** 18.

**Total yardage:** 252.

**Yards per pound:** 2,100.

**Yarn classification:** Fingering.

**Yardage used:** 69.

**Needles:** U.S. size 2.

**Gauge:** 6 sts and 12 rows = 1" after blocking.

**Stitch pattern:** Lucina Shell Pattern from *A Second Treasury of Knitting Patterns* by Barbara Walker (Pittsville, Wisconsin: Schoolhouse Press, 1998), page 226.

## DYEING

Jean premordanted her skein in alum and cream of tartar, following the procedure outlined in *Wild Color*. Because her yarn was half silk, she was careful not to heat the mordant solution beyond a simmer. As soon as a few bubbles appeared, she took the pan off the stove and let it sit overnight before proceeding with the dyeing.

Jean had gathered the flowers as they fell off the tall stalks and dried them. To dye without heat, she soaked 138 dried flowers in water for two days and then added the wool/silk skein, plus two small samples—one was 100 percent wool, one was 100 percent silk. Jean prepared both of these little skeins with

pre-mordanted cotton and linen ties because she wanted to learn as much as she possibly could from the 138 flowers. After two days, Jean removed the yarn, rinsed it, and washed it in Orvus Paste. The wool and silk blend was mauve, the wool was greenish gray, the cotton was very pale lavender, the silk was light purple, and the linen was a darker purple. At this point, Jean divided the dyebath into two containers, added 1 teaspoon baking soda to one of them, and continued experimenting. Essentially, changing the pH by adding the baking soda turned the wool and silk yarns green, whether or not they had first been dyed mauve. Jean loved the idea that she could achieve all these hues with-

out having to tend a stove. All in all, Jean says that dyeing black hollyhocks without heat was the most laid-back fun she has ever had with natural dyes. She speculates that she'll use the hollyhocks for linen and silk in the future to show off the mauve and purplish colors, since the green from the baking soda afterbath can be accomplished with other plants.

## SPINNING

Using a beautifully prepared roving of 50 percent Merino and 50 percent cultivated silk, Jean spun a fine, two-ply, medium-twist yarn. After washing the skein in Orvus Paste, she soaked it overnight in preparation for mordanting in cream of tartar and alum the next day.

## Lichen

Maryann Nowakowski of Brattleboro, Vermont, first saw fiber dyed with an orchil lichen dye in the 1980s when she belonged to the East Penn Fiber Guild based in Allentown, Pennsylvania. One of the members had gathered the lichens on her family's mountain camp property and dyed up a batch of fiber to share with guild members. The color was so appealing that Maryann decided that one day she would find a patch from which to harvest so that she could do her own dyeing. About twenty years later while living in Brattleboro, Vermont, Maryann discovered large expanses of rock ledge covered with rock tripe (*Umbilicaria mammulata*) along a



## Project Notes

**Dye:** Lichen (rock tripe or *Umbilicaria mammulata*).

**Mordant:** None.

**Fiber:** 3.5 oz mohair batt.

**Preparation:** Handpicked and drumcarded batt.

**Drafting method:** Supported long draw.

**Wheel:** Schacht double treadle.

**Wheel system:** Double drive.

**Ratio:** 9:1 (core); 15.5:1 (binder); 7.5:1 (plying).

**Singles direction spun:** Z.

**Singles wraps per inch:** 16 (core); 44 (binder).

**Twist angle:** 25°.

**Number of plies:** 2.

**Plied direction spun:** S.

**Plied twists per inch:** 8.

**Plied wraps per inch:** 12.

**Total yardage:** 200.

**Yards per pound:** 914.

**Yarn classification:** Worsted weight.

**Yardage used:** 33.

**Needles:** U.S. size 4.

**Gauge:** 4 sts and 7 rows = 1".

**Stitch pattern:** Fish Trap from *Arctic Lace* by Donna Druchunas (Fort Collins, Colorado: Nomad Press, 2006).



nearby access road. A member of the River Spinner's Guild in Brattleboro gave her the lichen dyeing recipe. Maryann very carefully harvested the lichen, taking small pieces and not denuding an area.

The yarn design Maryann chose was inspired by a brushed mohair yarn she saw on a recent visit to Harrisville Designs. She thinks she'll use the yarn for a hat. For the swatch, Maryann selected the Fish Trap stitch pattern from *Arctic Lace* by Donna Druchunas (Nomad Press, 2006).

### DYEING

Maryann placed the crumbled lichen in a 1-gallon glass jar (about one-third full) and then topped it off with a three-to-one solution of rainwater and household ammonia. Sealed with a lid, the jar sat for three months, though Maryann gently stirred it almost daily. To prepare the dyebath, Maryann removed the large

chunks of lichen and placed the commercially prepared mohair batt (contained in mesh bags) in the dyebath. She let the fiber sit undisturbed for about a week and then squeezed out the excess liquid and allowed it to dry and cure. Since the bath was not exhausted, Maryann used it again and obtained a rose hue.

### SPINNING

Maryann teased the fiber apart by hand and then drumcarded the batts in two passes. There were plenty of neps in the fiber, resulting in a yarn that was lumpier than Maryann preferred. She stripped the carded batts into eighths (lengthwise) and then attenuated each before spinning the singles using a supported long draw. She spun one thick (core) and one thin (binder) singles. After letting the yarn ply back on itself to determine the twist needed for a balanced ply, Maryann counted treadles as

she plied and ended up with a balanced skein. She washed the skein in warm, slightly sudsy water, rinsed it with a splash of white vinegar in the water, spun it in the washer, and hung it to dry on a drying rack. With the yarn still skeined, Maryann brushed it with a nylon bristle brush to gently bring up a halo. While this yarn does not look anything like the yarn she saw at Harrisville Designs (and she will try to achieve more of a halo in future projects), she is still very happy with the results.

### KNITTING

Maryann knitted loosely enough to allow the fibers to bloom during the fulling process. She squished the sample swatch in warm, sudsy water, rinsed it (again with vinegar in the water), spun it in the washer, and then blocked it on a towel. The yarn did exhibit more halo than it had before knitting.

## Sunlight and Leaves on the Bayou

Penelope Cox of Bay Saint Louis, Mississippi, enjoys taking on a challenge from time to time in order to grow and learn—and since it had been many years since her last natural-dyeing experience, she was excited to give it another try.



## Project Notes

**Dyes:** Spanish Moss from the oak trees in Pearlinton, Mississippi, not far from her home and turmeric from her kitchen cabinet.

**Mordant:** Alum and cream of tartar.

**Fiber:** 4 oz each of Falkland and Merino/SeaCell roving.

**Preparation:** Split in half and slightly predrafted.

**Drafting method:** Short forward draw.

**Wheel:** Lendrum double treadle.

**Wheel system:** Scotch tension.

**Ratio:** 17:1 (singles); 9:1 (plying).

**Singles direction spun:** Z.

**Singles twists per inch:** 6.5 (Falkland); 7.5 (Merino/SeaCell).

**Singles wraps per inch:** 34 (Falkland); 33 (Merino/SeaCell).

**Twist angle:** 21°.

**Number of plies:** 2.

**Plied direction spun:** S.

**Plied twists per inch:** 3.5.

**Plied wraps per inch:** 22.

**Total yardage:** 1,049.

**Yards per pound:** 2,100.

**Yarn classification:** Laceweight.

**Yardage used:** 47.

**Needles:** U.S. size 7 for the picot cast-on, U.S. size 5 for the rest of the swatch.

**Gauge:** 21 sts and 24 rows = 4".

**Stitch pattern:** Frost Flowers from Barbara Walker's *A Treasury of Knitting Patterns* (Pittsville, Wisconsin: Schoolhouse Press, 1998).

## DYEING

Penelope was inspired to try using Spanish moss when she saw Judy Gilchrist's entry in the Your Yarn section of the *Spin-Off* website for the Spring 2010 issue. She was amazed by the yellow Judy achieved with Spanish moss. Wanting to see if she could get a yellow from the local Spanish moss, Penelope gathered a plastic garbage bag full on a sunny day. A week later, after searching for a recipe without success, she decided to just go for it.

Penelope filled a large turkey roasting pan used exclusively for dyeing with moss and tap water and brought it to a simmer. She used a wooden spoon to crush the moss and simmered it for an hour. Meanwhile, she dissolved the alum and cream of tartar in boiling water. Once she strained the moss out of the dye liquid she added the mordant directly to the dyepot.

She presoaked her rovings and added them to the dyepot and brought it to a slow simmer, holding it at a simmer for an hour. She checked the color and was disappointed that she didn't get yellow; instead the roving was a lovely pale gray green, like the moss itself. Musing on this, Penelope decided to add a bit of turmeric spice (six small pinches) to see if that would yield yellow. The turmeric

instantly bit the roving and turned it a beautiful yellow with a greenish undertone. Penelope let the roving simmer another 5 to 10 minutes and then turned off the heat and allowed it to cool down in the pot.

She rinsed carefully and then placed the rinsed roving in a bin of hot water with a bit of vinegar. After 20 minutes, she spun the water out of the rovings using the spin cycle of the washing machine and then hung them up to dry.

## SPINNING

Penelope split each roving in half lengthwise and reserved half of each for a second skein. With roughly 2 ounces of the Falkland, she spun Z-twist on the fastest whorl of the flyer. The Falkland fiber was easy to spin by just slightly predrafting the length. When she finished spinning the Falkland, she spun the Merino/SeaCell blend, which was easier to spin by splitting it in half again (so it was in quarters).

She let the singles rest on the bobbins overnight and then put the plying head on her wheel and plied the two singles together with S-twist. Letting the plied yarn rest overnight, she then wound it onto a niddy-noddy to make a skein. Penelope soaked the skein for about 30 minutes, spun the excess water out, and hung the skein to dry with

a light weight (the folded towel that she used to absorb the last of the moisture). A few days later, she got to work spinning the remaining fiber and repeated the process to produce a second skein.



Turmeric spice used for dyeing.