

Silk Tidings

Greetings from Salt Spring Island

In the first yoga class of every year, this question is asked, "What does this year feel like?" Some of the answers included: Transformation, Higher Consciousness, More Joyful, and Continued Environmental Challenges. Who really knows, but we wish you all a year of peace, hope, productivity and good health, accompanied by the fortitude and wisdom to deal graciously with any challenges that come your way.

In the Chinese lunar calendar, 2011 is the Year of the Golden

Rabbit. It is a lucky sign and it is also said that wishes are more likely to be fulfilled in this year. We hope our collective wishes for peace, joy,



http://www. yearoftherabbit printexhibition. blogspot.com/

shelter and enough food for everyone inhabiting our earth will be attained. The Year of the Rabbit is a year to catch our breath and calm our nerves. We can gain our greatest benefits by focusing on home, family, security, relationships, especially with women and children.

It feels and sounds like a good year to tuck in and create adventure,

Continued on page 2...

Treenway for Sale

We reached retirement age this year and have decided to officially put Treenway Silks up for sale. Some very important facts:

- Treenway has not been sold; it is, however, up for sale
- We are **not going out of business**.

We will continue running the business as usual, and it will have no effect whatsoever on our customers. We are announcing it to all of

you to avoid rumours and, more importantly, we have nearly 7,000 people receiving the newsletter and among those 7,000 fibre fanatics there could be one or two interested in buying the business.



We would like to retire and spend more time with our grandchildren, in the garden and studio.

We started the business 34 years ago and we are looking forward to the next phase of our lives.

The business has established a very good reputation over the 34 years of operation. The name Treenway is synonymous with silk. It has provided a living for us and part time work for three other people who send out your products, keep the books and keep the website up to date along with all the other graphic work of ads, brochures and the like. We are proud that Treenway

Continued on page 9...



Our next Silkster's Gallery will be in our May issue. We encourage all of you to send photos of your work using Treenway silks. It is fun and inspirational for all of us to see what unique work is being produced. We reward you for your time with silk product from Treenway.

See our web site for details of what we require from you to participate in this exciting gallery. We so look forward to your entries.

www.treenwaysilks.com/gallery.html

fun and loving warmth right in our own back yards. We are fortunate to have the skills to make all of these things a reality in our studios. It will be a great year to share your love and appreciation of beautiful fibres, textiles, colours and texture with children and others who have not had the opportunity to be introduced to the magic of how cloth is made and decorated. People are always enthralled – share your magic.

We look back and forward with gratitude at having had the pleasure of providing you with a beautiful product and our best efforts of good service over the past 34 years. Thank you all for your support and the creative energy put forth into the universe. May this year bring you everything you need.

Clay/Straw House

Well, we are finally in our wonderful home. Through the newsletter, you have all lived through the trials and tribulations of the building of this house. Thank you to so many of you that sent little emails of encouragement. During the nearly four years in the making, it was much appreciated.





Right:
the teak dining table
from Burma with the
masonry stove behind
Below right:
Octagonal reading
nook.
Below left:
View out the French
doors of Mount Baker
behind Pender Island.
Bottom left:
Some of our treasures
from Asia in the dining
room



As many of you are aware, we have taken a number of trips throughout Asia in search of everything we could learn about our beloved silk. We gathered a lot of treasures during these sojourns which have been tucked away in storage for over 10 years. It has been giddy fun bringing out the baskets, lacquerware, textiles, rugs and other goodies and making our house a home.

Here is a little tour: as you enter the front door you look out the French doors of the living room over Haro Strait and Pender Island to Mt. Baker.

In the centre of the great room is the masonry

stove between the living room and the dining room; the fire can be seen from both sides. We actually designed the dining area around a big teak table from Burma which can easily seat 10-12 people for dinner.

Continued on page 3...





We have always loved having people over and sharing good food. On one end of the dining room is a sunny reading nook. The octagonal space catches sun all day from the east, south and west, which is so welcome this time of year.

We have huge four foot overhangs on the roof to give us protection from the rain in the winter and relief from the sun in the summer. When the sun is low in the sky in the winter, it comes streaming in giving us passive solar heat. The earthen floor and straw/clay walls absorb this warmth and slowly releases it back to us.

The kitchen has proven to be very efficient and an absolute dream to work in. The living room is cozy with the fire, beautiful textiles and large vegetable dyed rug.

The house has two wings, the great room in one wing and our bedroom and studio in the other. They are separated by a hallway with den on one side and bathroom and laundry on the other. The hall was designed to showcase some of our textile collection.







The house was built with materials Terry collected for many years and wonderful gifts from lots of friends: (trees from Neil and Steve & Trudy's property are the posts that hold up the great room). Mixed in with these materials are lots of love from the helping hands and feet of many friends. Mikey, Silas and Robert dedicated such artistic craftsmanship and love in all their finishing work in the house. It has truly been a joint effort to reach its completion. Every day we feel the love and caring of all those people in the walls, floors and supports of our house.



The Pulse of Treenway

We are a busy little operation with many people doing a variety of things to enable us to offer the best products in a friendly, caring efficient manner. In this issue we would like to introduce you to another of our talented dyers.

Charlene Wolff

Charlene is a many faceted and most interesting person. She came to us by a suggestion from Mary and Cheryl, two of our other dyers whom you have met in past newsletters. We needed more help, especially with the Salt Spring Island Series, the dyed tussah roving. Charlene was a friend of Mary and Cheryl's from the weavers and spinners guild. They recognized she was always busy and up for new challenges. When Mary and Cheryl asked her about having an interest in dyeing for Treenway in 2006, she jumped at the chance. We are very appreciative of Charlene's beautiful technical work with the dyeing and her lovely and joyful personality.

The fibre is one of the most difficult things to dye, due to the difficulty in getting the dye to penetrate evenly. However, Charlene told me she loves it because it does not feel as exacting as following a formula to

match the solid colours of yarn, so there is barely any difference from one dye lot to another. Dyeing the roving feels freeform and more like play than work for Charlene.

Her husband,

Robin, works at our local refuse station located on Blackburn Rd. Here on Salt Spring Island, it is affectionately known as Blackburn Mall. Many guest cottages and renovations have been built with discarded windows, lumber and the like from Blackburn Mall. Robin is extremely resourceful and helped Charlene get set up with everything from the dump. He refers to himself as a treasure hunter. Charlene's steamer is an old hot water tank laid on its side. Robin cut a very large lid and hinged it. He put in layers of trays and Charlene has a wonderful and very larger steamer for her fibre. Charlene's workshop is in their basement and

all the tables, counters, shelves and sinks come from Blackburn Mall as well.

Charlene's training was in Therapeutic Recreation which included art therapy. This led to group home work which led to her current valued home support work here on the island. She does a lot of palliative care and finds it extremely rewarding.

She does many other things that fill in her "spare" time. She records the memoirs of Salt Spring elders and teaches First Aid classes. She took a film course in 2007 and is making short video films of the nature of photo collages of people's lives, poem readings and utube videos.

She is currently working on a book titled: <u>Harness</u> the Power of Your Maternal Instincts. She wants to assist each of us to use our instinctual creative energy

to manifest the creations of our minds. She believes there is a creative way to approach everything in our lives from birth, school, work, play, relationships and dying.

Charlene felt like she has

come home when she joined the Weavers and Spinners Guild. When I asked her why, she replied that everyone had so many projects on the go. Some were finished all in one go and others had been sitting for a number of years. This was just like her and all these projects are just part of the creative process.

When I asked Charlene if there was anything she would like people to know about her she said two things, "Working with and looking at colour helps a person to appreciate the complex nuances of the depth of colour in nature and have fun, play and be creative in everything you do."

Specialty Fleeces

Specialty Fleeces From New Zealand

Our specialty fleeces for 2011 have arrived! As usual this year's fleeces are lovely and are a treat to all the senses. We did not receive as large a selection of breeds nor the quantities as we usually have. The environmental climate of each year differs and affects the sheep fleeces differently. If the fleeces of a particular breed are not of a sufficient quality, they are not even offered to us.

The information below regarding breeds is from New Zealand Sheep and Their Wool published by Wools of New Zealand and New Zealand and Its Sheep by Godfrey Bowen and is also provided to us by Ashford Handicrafts.

Corriedale

The lovely fine fibres and long staples have made this breed a favourite spinning fleece for many years. Flick card only and wash carefully in hot soapy water after spinning. The Corriedale is a cross with longwool breeds and Merino. It was developed on the South Island of New Zealand at the turn of the last century as Merino was not suitable to wetter country. British breeds were used to cross with the Merino giving it the strong body of a British breed and the medium to fine wool of the Merino.

English Leicester

The heavy curly lustrous wool is even in length and fibre diameter. You could show these lovely staples off using them as surface texture in felting or weaving. English Leicester is one of the Old English breeds developed in Leicestershire and dates back to the 1700s. For many years it was the most popular long wool sheep in the North of England with a dual purpose of large meat body, with a heavy strong fleece of wool renowned for its wavy crimp and big round locks.

Gotland

We are fortunate to be able to offer these lovely fleeces again this year. The colour choice is varied and scrumptious as always. The fibres are soft and silky for spinning, with a high lustre and low bulk. It is popular in the high fashion industry as well as with handspinners for knitwear and weaving as well as felting. The Gotland originated on the Swedish Island of Gotland in the Baltic Sea. It is a native Landrace breed belonging to the North European short-tailed group of sheep. Lambs are born jet black and have developed their distinctive grey curly pelt by the time they are about five months.



http://en.wikipedia.org/wiki/en:GNU_Free_Documentation_License Photo by Fir0002/Flagstaffotos (wikipedia.org).

Lincoln

The Lincoln is one of the four English longwool breed: Cotswold, Leicester Longwood, Lincoln and Wensleydale. Lincoln sheep are large and lincoln wool is long and lustrous. Lincolns may be white or coloured including shades of grey, silver, charcoal and black. The staple is one of the longest of all breeds ranging from 8 to 15 inches and has considerable lustre.

Merino

These superfine fleeces are easier to manage if you separate out the staples and wash them one by one carefully in hot soapy water to soften the lanolin before spinning. Spin them very fine with a high twist. For people wanting to spin some super-fine threads for the first time, we can recommend the book Merino by Margaret Stove. This takes you through the step-by-step stages of sorting and washing and the techniques of spinning the fine Merino fibres. The Merino is the oldest established and most numerous breed in the world. It is believed to have originated from Spain or North Africa. Merino is a sheep apart from the many British breeds. It likes dry conditions and is renowned for its fine quality wool.

Perendale

Pernedale is a Cheviot and Romney cross which is an easy care breed that can forage in the hill country of New Zealand. The fleece settled into the finer crossbred range with exceptional spring which gives good shape retention to knitted garments and adds bulk and standup ability to carpet pile. It has a high insulation factor in blankets.

Continued on page 6...

Romney

This fleece is very popular because of the unique way it combines several traits. The fleece is lustrous, hangs in separate locks, with minimal cross fibres between the locks. Uniformity of crimp from the butt to the tip of lock is typical. Romney wool has the finest fibre diameter of all the long wool breeds, with a spinning count from 40-48 which is 38-31 microns. It spins easily with a low grease content that makes it a very light shrinking fleece. These qualities enable Romney to be used for many products, ranging from sweaters to outerwear to carpets. The Romney originates from the wet fens of south-east England.

Flee	ece # Breed	Weig	Weight (kg) Colour					
Cor	riedale	_						
1	Corriedale	3.7	Dark grey/black					
2	Corriedale	1.9	Dark gr	ey/black				
3	Corriedale	2.4	Light gı	ey to mid grey with light tip				
4	Corriedale	2.6	Light gı	ey, bright tip, fine crimp				
6	Corriedale	3.2	Mediun	n brown, light tip				
7	Corriedale	2.6	White					
8	Corriedale	2.5	White					
English Leicester								
9 English Leicester			3.8	Light grey / dark grey				

Orders

Orders will be taken on a first come first served basis. When you send in your order please include the fleece number, breed and weight. As well, it is advisable to include a second and even third choice in case your first choice has already been spoken for.

Pricing

All fleeces except Merino: \$27.50/kg (\$12.50/lb) Merino fleeces: \$29.50/kg (\$13.40/lb)

Please note

- 1. Weights on the list are shown in kilograms (kg). 1kg = 2.2lb
- 2. Prices are in Canadian funds.
- 3. Fleece numbers with an A or B are one half of a fleece (eg. 68A and 68B are each half of one fleece). These fleeces have been split due to their size.
- 4. The list is in PDF format. If you need to download a free copy of Adobe Reader, you can do so here:

4	Corriedale	2.6	Light grey, bright tip, fine crimp		www.adobe.com. If you have any difficulties					
6	Corriedale	3.2	Medium brown, light tip			viewing this list please let us know.				
7	Corriedale	2.6	White							
8	Corriedale	2.5	White							
English Leicester										
9	English Leic	ester	3.8	with light tip		Fleece # Breed 44 Merino		Weight (kg) Colour 3.4 Multi-White/Dark Grey/Black		
10	English Leic	ester	2.7			Merino	3.4	Light grey to dark grey		
11 English Leicester		2.5	Mid grey / dark grey to	45 46	Merino	2.2	Light grey/dark brown/grey			
	J			nearly black, curly	47	Merino	2.0	Black with white streaks		
13	English Leic	ester	2.5	White	48	Merino	3.0	White streaks, medium brown/		
99	English Leic	ester	3.0	Dark grey/black	10	Wierinio	5.0	black		
Got	land				51B	Merino	1.2	White		
15	Gotland	2.6	Dark a	nd light greys	52	Merino	1.6	White		
19	Gotland	2.9	White-medium grey			Perendale				
26	Gotland	1.4	White-black		53	Perendale	2.5	White		
27	Gotland	2.4	White-dark grey		55	Perendale	2.4	White		
28	Gotland	2.3	Some white to dark grey		56	Perendale	2.5	White		
29	Gotland	2.1	White-black		Romney					
32	Gotland	1.2	Light grey		60	Romney	3.4	Mid-dark grey with caramel tips		
33	Gotland	1.7	Light-medium grey		61	Romney	3.8	Mid brown grey/Dark brown grey,		
37	Gotland	1.6	Grey			,		caramel tip		
Lin	coln				62	Romney	3.3	Mid brown, caramel tips, bulky		
	3 Lincoln	2.9	White		63	Romney	3.2	Mid brown, grey caramel tips		
	Lincoln	3.0	White		64	Romney	3.2	Mid-dark brown grey		
	Lincoln	3.0	White		65	Romney	2.9	Champagne to mid grey		
40E	B Lincoln	2.5	White		66	Romney	2.5	Champagne-mid brown grey		
					67	Romney	2.8	Light grey-brown-medium grey		
Me	rino				70	Romney	3.2	Mixed pale grey		
42	Merino	2.0		with white streaks	71	Romney	3.0	Mid grey, light tips		
43	Merino	3.5	White/	/Dark Grey/Black						

New Products

Muga Spun Silk Yarn

Hallelujah! We have muga yarn again. This is a very special and rare yarn from Assam, India and we cannot always get it. We were out of it for nearly a year and we are thrilled we found another supplier with an even better quality of yarn than we previously had.



Muga is the common name of the caterpillar Antherea assama. (The Asian Journal section of the last newsletter started an in depth look at this fascinating creature and continues in this newsletter.) It is a cousin to the tussah caterpillar and produces a glowing golden colour silk when reeled from the cocoon. As a spun yarn it is a golden honey colour. Muga is unique because the eco-system provided by the Brahmaputra River valley in India is the only place that provides the perfect conditions for its growth. Muga sericulture was encouraged by the ancient royalty of Assam, but hit serious decline with the clearing of forests to make way for tea plantations. The Assamese struggle to continue raising Muga silk because it is woven into the fabric of their traditions, culture and economy.

The twist of this yarn is just right, not too tight and not too loose. It will wear well yet make a soft cloth. The yarn is handmade so expect those wonderful irregularities of a handmade yarn. It performs well as warp or weft with many of our other yarns that are similar in weight: 30/2 silk, silk/angora, silk/bamboo, silk/camel, silk/cashmere, silk/cotton, silk/ramie, silk/ wool and 30/2 tussah. The sett varies from 28-36 epi depending on whether it is woven in tabby or twill.

The skeins weight approx. 100g (3.5 oz) and have approx 6,800 yd/lb or approx. 1,350 yd/skein.

The price is \$249.50/kg or \$24.95/100g skein.

Natural by Nature - 8 Shaft Scarf Kit

Muga is back so Natural by Nature is back. This scarf utilises the different natural colours, textures and sheen of the wild silks, muga and tussah, as well as reeled, spun and noil yarns of the domesticated white Bombyx mori silk. The



subtle differences play peek-a-boo in the 8 shaft block weave. The scarf is sophisticated, elegant and feels good on the skin.

The kit contains a pre-wound warp long enough to weave two scarves approx 6 1/2" wide by 72" long at a sett of 30 epi. The weft yarn along with complete warping and weaving instructions are included in the gift box.

Featured in the May/June 2009 issue of Handwoven. The price is \$86.



Specials

Fine Cord Reeled Silk Yarn

Fine Cord is three ply, tightly twisted and an excellent choice for anything requiring strength and durability. It comes in full skeins (approx. 80g or 2.8 oz) and we also wind it into 10 yard mini-skeins in 53 different colours for accents, tapestries, kumihimo, stitching and sampling.



Fine cord is particularly well suited to kumihimo, tablet weaving, braiding and woven structures with a float. Its crisp texture due to the plies and twisting and high sheen creates an intriguing contrast in a cloth when mixed with 20/2 spun silk, silk/cotton, 20/2 noil yarn and similar yarns. Cloth woven with fine cord softens with washing.

The sett varies from 24 to 26 epi depending on whether it is woven in tabby or twill.

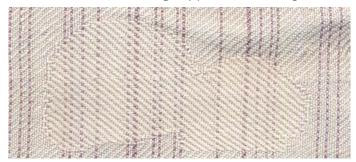
Skeins weigh approx. 80g (2.8 oz) and have approx.

3,100 yd/lb (approx. 495 yd/skein).

Regular Price: \$298.50/kg

Discounted 30%

Sale Price: \$208.95/kg (approx. \$16.75/80g skein)



NOTE on SPECIALS

- 1. Prices do not include shipping.
- 2. Specials end April 30th, 2011.
- 3. Regular 10% Discount: Our normal Bulk Discount for orders of silk yarns and fibres over \$150.00 CDN does not apply to Specials items.

Remember

All prices are in Canadian funds.

Approximate exchange rate: \$1.00 Cdn = \$1.01 US

10/1 Noil Silk Yarn

Noil yarn is the by-product of making the higher quality reeled and spun silk yarn. It is made of short, lacklustre fibres and has a slight texture and matte finish when spun into yarn. Its character provides a fun hide and seek play between the matte noil and shininess of the higher quality silks.



This unplied, singles yarn is suggested to be used as weft only. It combines beautifully with 20/2 spun silk or fine cord to make a comfy garment.

The skeins weigh approx. 70-110g (2.5-3.7 oz) and have approx. 610-1135 yd/skein.

Regular Price: \$60.50/kg

Discounted 30%

Sale Price: \$42.35/kg (approx. \$4.25/100g skein)

Continued on page 9....

Below: Monk's Belt, 10/1 Noil warp, spun silk and cotton weft, sett 24 epi. Below left: 4 Shaft Freeform Twill, Fine Cord warp, 20/2 spun silk weft, sett 24 epi.



Web Specials

In addition to our newsletter specials, we have specials posted on our website. We notify everyone on our email list each time we post new specials. You can also check our website periodically. See the Specials button in the drop-down menu or go to www.treenwaysilks.com/sale.html.

If you would like to be added to this list, please send us your full name and email address to **info@treenwaysilks.com**. Please add us to your address book to ensure you receive our emails.

Poster

This artful and educational poster was designed and written by Treenway with the help of local artist Donald Gunn's exquisite drawings and suggestions.

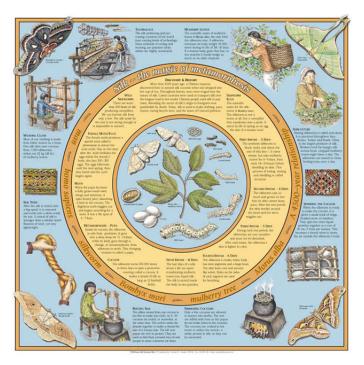
It describes the life cycle of the silkworm from egg to cocoon, to moth, to silkworm again within a circle. The area outside the circle explains and depicts how the silken strand is released from the cocoon and made into yarn and cloth.

The back of this 18" x 18" poster is filled with further fascinating silk information. It is a perfect gift for your studio wall or that of another fibre fanatic or teacher. As a teaching tool it spans science, culture and history. You can view it on our website: www.treenwaysilks.com/educational.html A couple of interesting quotes from the poster:

A silkworm increases its body weight 10,000 times during its life of 28-30 days. If a human baby grew that fast, in two months it would weigh as much as an adult elephant.

The silkworm turns 200,000 times in three days to spin a protective covering called a cocoon. It makes a strand of silk as long as 12 football fields.

Regular Price: \$8.00 Discounted 25% Sale Price: \$6.00



Silk Caps for Spinning

Silk caps are made from degummed cocoons that have been simmered until the cocoon becomes soft enough to pry open with the fingers. The degummed cocoon is pulled, expanded and stretched as evenly as possible into a gossamer silk film and shaped over an arched bamboo slat. Ten cocoons are pulled over the frame to make one cap. Enough caps are stacked on top of each other until the pile weighs about 500g (approx 1 lb). One more cap is opened and slipped over the stack, like a hat and tied at the bottom to make a neat, compact package called a bell. Our caps are A1 quality from China.

To prepare the cap for spinning, insert your hands inside the cap. Gently and continually push your hands apart to expand the cap. Eventually a hole will be torn in the top. Keep expanding until you have a thin giant donut with a huge hole in the middle. Now you can break the donut and you have created a roving for spinning. For more information about spinning see our website: www.treenwaysilks.com/inout_spinning.html

Regular price: \$76.75/500g bell of caps

Discounted 25%

Sale Price: \$57.50/500g bell of caps

continued.... Treenway for Sale



has also provided the opportunity for five hand-dyers and a packager (of all the kits) to work out of their homes as a cottage industry.

It has been a privilege to have worked with such a luxurious and amazing fibre as silk, which is natural, sustainable and supports many farmers and factory workers. The business is portable and can be located anywhere. It is a great opportunity for someone to work at home and sell silk all over the world. Of course, our products come from Asia and that means periodic journeys to keep those very important relationships alive. Someone has to do it!

The most important assets for a potential buyer to have are good computer skills, good organizational skills, good people skills and, of course, some knowledge or interest in fibres, yarns and silk. Artistic ability would be a great asset, but not necessary. In any case, we would train the new owner(s). We are offering the business for \$75,000 plus the inventory. The inventory varies from \$80,000 to \$105,000. For more information email or phone us for a business package and chat.

Asian Journal

Muga, Antheraea Assama – God's Gift to Assam Assam, India

We are continuing the story of the muga caterpillar. The CSB (Central Silk Board) consists of a team of scientists and humanitarians who are dedicated to promoting silk and improving the lives of the caretakers and producers of silk. They are directly involved with the silkworm rearer and accompany us to the villages.

Protecting Silkworms

Because the muga silkworms prefer to live and dine outdoors, their mortality rate is high. Only 10,000 cocoons are harvested from 19,000 caterpillars. They are vulnerable to temperature fluctuations, heavy rains, smoke dust, disease and a variety of predators: birds, wasps, snakes, monkeys and the like. The rearers we visited used sling shots with mud balls, noisy bamboo clappers and small bows and arrows to keep watch over their crop.



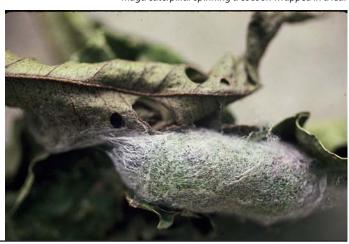


Chasing birds away from the trees filled with muga silkworms

Forming Cocoon

We visited a state muga station late in the day when many silkworms were descending the tree. They were ready to start spinning their cocoons. To prove this was so, a man held a worm close to my ear and rolled it in his fingers. It made a scrunching sound, like some silk yarns! This sound is produced because the caterpillar has eliminated all of its body waste in preparation for cocoon spinning. Muga larvae spin their cocoons in bundles of leaves. Each bundle, called a jail, is made from jack-fruit, mango or other large leaves which the rearers gather, bind together, and sit in the sun to partially dry. As they dry the leaves curl. "Ripe" larvae are collected and placed on a jail. When a caterpillar has found its spinning nook, it throws out attachment threads and makes a hammock. These loose filaments, called floss, become waste when the cocoon is reeled. The larva excretes its continuous filament for a total of between 400 and 430 yards of silk. Continued on page 10....

Muga caterpillar spinning a cocoon wrapped in a leaf



1.888.383.7455 www.treenwaysilks.com Treenway Silks

Finished, the golden-brown muga cocoon measures about 1 by 2 ½ inches (2.5 by 6.5 cm). Its precise colour, shape and size depend on the quality of the seed, as well as the weather, the food leaves and the care which it has received. About six to ten days after spinning, the cocoons are removed from the jails and sorted for use as seed or silk.

Reeling

A journey in search of the golden muga in Assam is not complete without a journey to Sualkuchi. It remains the main weaving and reeling centre for muga since before 300 BC. The CSB is proud of what they are accomplishing with reeling machines for muga fibre in the last 15 years. Muga contains less sericin than either tasar or bombyx cocoons, so reeling is a delicate and



Left: Reeling machine for muga silk. Below: Attending to three bobbins of reeled silk simultaneously.



Feeder and reeler on either side of the bhir reeling machine.

more difficult operation. During my first trips to Assam, the CSB was still struggling with making a good reeling machine that was suitable for muga. Now they have 24 machines in the Sualkuchi area.

The gummy sericin has to be removed before muga cocoons can be reeled. This requires that the cocoons be boiled for between 15 and 30 minutes in water made alkaline by adding soda ash. Muga yarn and fabric are softer today than ten years ago when the ash from burned banana leaves, wood or straw was used as as the alkaline to degum the silk. Muga is more delicate than other silks and over-boiling weakens the silk, so this process is carefully monitored and the cocoons are removed when the filaments become loose enough to be reeled.

Ten cocoons are reeled together to make a warp yarn and 12 cocoons are reeled together to make a weft yarn. In a six to seven hour day, a person can reel 1,000 muga cocoons to get 200-250g of yarn.

Forearm Reeling

Before reeling machines, all the muga was reeled on women's forearms. Today 40% of the reeling is done in small factories (6-10 machines) and 60% is done by hand.

Reeling is a side business in addition to farming for the village of 100 families we visited. Later in the day we visited a family of seven. Two sisters, one in grade 10 and one in grade 9, were forearm reeling. On school days, they bicycle about 6km to school, which is provided by the government. During reeling season, they forearm reel after school. Cocoons are bought from

continued on page 11...



Preparing muga cocoons for feeding to a reeler.



Muga forearm reeling.

upper Assam and reeled as soon as they are available. They cannot store cocoons for very long due to insects which like to eat the pupa inside. They do the reeling from November to January and again from May to June.

The forearm reeling technique requires two people and a simple reeling machine called a bhir which is a wooden stand that supports a shaft with a large bamboo bobbin on one end and a wheel on the other end.

Cocoons are placed in a basin over a fire on one side of the bhir. The fire keeps the cocoons warm, so the sericin remains soft. One person, the feeder, sits by the basin. The second person, the reeler, sits facing the feeder on the other side of the bhir. The feeder passes between seven and ten filaments from the cocoons to the reeler's right hand. With the right palm, the reeler

rubs the strands down the left forearm, which twists them together and increases the cohesion of the yarn. At the same time, the reeler's right hand turns the wheel of the bhir and winds the yarn onto the bobbin.

Only about half of each cocoon is reelable, because the inside layers of silk are weak. As soon as a filament breaks, the remainder of that cocoon is regarded as waste. This goes to spinning mills, where it is degummed, carded, and combed before being spun into beautiful yarn.

In an eight hour day, a team can reel approx 300m of yarn weighting about 110 grams (3.5 ounces). This is about half of what a reeling machine can do during the same amount of time. However, there is only 5% waste with hand reeling and 15-20% waste using the machine.