At the recent spinning wheel clinic at the Weaver’s Guild, Pat Boutin Wald gave me a small skein of blue-green (turquoise) wool that she had dyed 5 or 6 years ago in Seattle. She mentioned the unusual color was a result of dyeing the yarn with a rock that was also used by the weavers of the Chilkat blanket. She offered to loan me her rock (friends and family are beginning to at least snicker, if not worry, when they hear I am borrowing rocks). While in undergraduate school at the University of Washington, Pat studied the primitive looms of the Northwest Coast Indians. The Chilkat loom was one of the several looms that she researched.

The Chilkat blankets are actually shawl-shaped robes worn for ceremonial occasions such as dances, their prime purpose being a means for the exhibition of the clan’s emblem. The designs are distinctive and if you’ve seen them you aren’t likely to forget. I remember being struck by their beauty at an Indian exhibition a few years ago at Walker Art Center. The designs are rigidly composed, in a totemic manner, of abstract animal forms surrounded by numerous decorative patterns which completely fill the space. Although Chilkat weaving most often takes the form of blankets, leggings, aprons or sleeveless shirts (see photo) were also made.

Although I am concerned primarily with the dyes, the weaving and spinning techniques of the Chilkats also offer an intriguing area of study. The loom was similar to a portable warp-weighted loom; the long warps, rather than being weighted, were gathered together and bagged in goat intestines to prevent tangling. The yarns were twisted, 2-strand cords made from the inner bark of the yellow or red cedar; they were given a covering of soft wool. The weft was of mountain goat wool and was double spun in a manner similar to the Navajo style and then plied. The weaving, Pat explained, was a complex system of horizontal and vertical twining using both 2 and 3 strand techniques.

It was while studying the primitive loom techniques that Pat had the memorable experience of trying to obtain the traditional blue-green used in the Chilkat weaving. There were rigid rules for the colors in the blankets; in addition to the blue-green already mentioned, yellow, black, and the natural white of the wool were used. A lichen, Evernia vulpina, was boiled in the fresh urine of children to extract the yellow. The yarn was then boiled briefly in the extraction, steeped, rinsed and sun-dried. The black was obtained by a long process of boiling and steeping the yarn in a prepared bath of fresh hemlock bark and urine, then boiling it in another prepared bath of copper and urine and finally rinsing and drying. The most valued of the colors, blue-green, was a result of the oxidation of copper in urine. The copper was boiled in urine, the yarn entered and boiled, then rinsed and dried in the sun. A blue clay stone was mentioned also as having been used to obtain this color, but I found no specific information as to what it was.

The copper ore sent by a friend in Alaska, Mac McCoy, was what Pat used for her experiments. She and a woman who had been commissioned to weave some Chilkat leggings were trying to dye the yarn to be used with the traditional dye stuffs. The copper ore was first soaked in some 3-month-old urine. Because they had to work outside (Pat still remembers the odor!), they heated water and ammonia inside and then added it to the urine. The yarn was entered and eventually put into the sun to dry. The color Pat says they obtained was a “steely blue.” Later experiments by her friends using various techniques resulted in the decision that exposure to the sun was the key to the color changing to the desired blue-green. And, in fact, 5 or 6 years later when Pat gave me the sample of her yarn, it had turned to a lovely deep blue-green.

It was a color I had never seen in natural dyeing and so I took Pat’s rock offer and proceeded to my kitchen. In an attempt to see what variations were possible, I did 5 experiments.

1. Copper ore was boiled in ammonia for 10 minutes, the yarn was entered for 2 minutes, the result was a gray-blue tinged with brown, as if it had been burned by the ammonia.
2. Copper ore was boiled in water for 10 minutes, the yarn was entered for 2 minutes, the result was no color.
3. Copper ore was boiled in ammonia for 10 minutes, an equal amount of water was added and it was again brought to a boil, the yarn was entered for 2 minutes, the result was a clear, light blue-gray.
4. Copper sulfate was dissolved in ammonia, brought to a boil, the yarn entered for 2 minutes, the result was a dark green-blue (not blue-green). This was as close as I came to Pat’s sample although it was warmer, more yellow than hers, perhaps because it was copper sulfate that was used.
5. Copper sulfate was dissolved in water, brought to a boil, the yarn was entered for 2 minutes, the result was a light green-blue, what most of us think of as aqua.

All of these samples (both fleeces and handspun wool were used in each pot) were divided in half; one half was kept as a control and the other half is being exposed to light. Thus no color change has been noticed in those exposed to the light, however, I will continue the experiments. I used the copper sulfate, in addition to the copper ore, for two reasons. First, I used it for comparison, but I also wanted to answer a question that had been asked in nearly every class I teach. Can the copper sulfate we use as a mordant also be used as a dye? The aqua is lovely, but my concern was it’s fastness. We will know as soon as the light tests are completed. Both Pat and I are interested in further experiments with the copper as a dye. If any of you have any further information, any clever ideas or just want to get together with us to experiment, let us know.

Few Chilkat blankets remain. One reason was the custom of hanging the blanket of the deceased on the grave house or on the mortuary column. The result was eventual disintegration caused by the weathering. According to Pat (at one time) the blankets were also cut up and used like currency. These practices, along with the fact that there are few weavers who know how to weave the blankets, have left us with a tradition that seems destined for extinction. Pat Boutin Wald is hoping to arouse some interest in the special looms and weaving techniques she has studied. Sometime in the future she is planning to give a slide-lecture on the Northwest Coast Indians and their weaving.
1. Several delightful conversations with Pat Boutin Wald.


Although she does not raise or spin the silk, Cheryl imports the yarn in large variety, mostly from Europe. Some of the very fine silks come from Japan, but they tend to be quite expensive. Cheryl mentioned that she hopes regulations will be changed in the near future so that she can add Mainland China to her sources. Her main goal now is the completion of a book she is writing about all aspects of silk, from scouring and degumming to weaving. She will also be speaking on silk dyeing at Convergence in Colorado.

While country living has its advantages, Cheryl says she misses communication with other fiber people and welcomes visitors to the farm. Don’t be dismayed by the rickety bridge crossing the creek at the edge of their farm. Cheryl assured us that it holds their pickup truck; but you might, as I did, choose to walk up the lane!!

If you are interested in contacting Cheryl, her address is:

Cheryl Klander
276 North Myrtle
Myrtle Creek, Oregon 97457

Ann Fox

If you have the urge to travel and learn more about weaving at the same time, a summer of travel and weaving workshops in Scandinavia might be just what you’re looking for.

VESTERHEIM TO SPONSOR NORWAY TOUR

Vesterheim, the Norwegian-American Museum in Decorah, Iowa, will sponsor a tour of Norway in August which will include ten days of instruction in traditional Norwegian weaving techniques at the weaving studios of Rauland Academy. This will be a serious course for experienced weavers. The major instructor is Elsa Bjerck, a recognized weaver and textile expert from Jolster in Sogn, Norway. A Norwegian-American weaver will assist to solve possible problems of language and terminology.

For non-weavers there will be beginning classes in embroidery, rosemaling (already filled), and woodcarving.

If you cannot go on the tour but would like some experience with traditional Norwegian weaving, there will be an opportunity to study tapestry techniques or belt weaving in workshops with Elsa Bjerck at the Museum in Decorah in April. Participants in the workshops will have an opportunity to become familiar with the extensive textile collection of the Museum.

WEAVERS TOUR OF SWEDEN

A Swedish Workshop Tour for weavers and woodworkers from June 17-July 11, 1978, will feature a four-day weaving workshop with Malin Selander, noted Swedish designer-weaver-author at Hanterverkets Skola in Leksand. Workshops in spinning with Anne-Marie Stockenstrom in Leksand, and dyeing and band weaving workshops in Visby will be a part of the tour also, along with sightseeing and visits to studios and museums. Woodworkers will attend an 8-day workshop at Hanterverkets skola in Leksand. Further information can be obtained by writing to Mary Cramer, 3315 N. Shepard Ave., Milwaukee, WI 53211.