

# TEXTILES AND APPAREL NEWSLETTER

## Contents

### Announcing

Cornell Costume Collection  
News 1

### Concerning Consumers

Show a Little Skin 2

### Supporting Industry

CEO of Patagonia to Speak 2

### Exploring Fabrics

Drawn Thread Work 3

### Enhancing Safety

Engineering Influences PPE  
Requirements 3

### Emerging Technology

Body Scanning Comes to  
Cornell 4

### Browsing Websites

PENpages Regroup 4

## Announcing

### Cornell Costume Collection News

CHARLOTTE JIROUSEK

Spring 2001 welcomes several events related to the Cornell Costume Collection. All exhibits open March 31 and run through June 17, 2001.

#### Common Threads: Dress, Identity and Art in the Twentieth Century

(Location - Herbert F. Johnson Museum of Art, Cornell University)

An exhibition that places works from the collections of the Herbert F. Johnson Museum of Art in context with contemporaneous fashions. The exhibition demonstrates how changes in fashion and art interacted, reflecting transformations in gender roles and social identity throughout the twentieth century. Charlotte Jirousek, Cornell Costume and Textile Collection, Curator.

#### Uncommon Threads: Contemporary Artists and Clothing

(Location - Herbert F. Johnson Museum of Art, Cornell University)

An invitational exhibition of contemporary artists who incorporate clothing in their conception and/or construction of works of art. Sean Ulmer, Johnson Museum of Art, Curator.

#### Little Threads: Children's Costume in the Cornell Costume and Textile Collection

(Location - Cornell Costume and Textile Collection Gallery, MVR Hall, Cornell University)

This exhibition traces the relationship of children's dress to our expectations for children's lives from infancy through the various passages and activities of childhood. The exhibition, conceived and designed by Susan Greene, also became a learning opportunity as students in HD 241 History of Childhood participated in an interdepartmental research project based on, and incorporated into, the exhibition.

#### Regional Meeting: Costume Society of America (Region II)

Costume Society members from Region II will meet Saturday, April 21 at Cornell. Those interested in attending may contact Charlotte Jirousek (caj7@cornell.edu; 607-255-8064) to be mailed a registration form.

## CONCERNING CONSUMERS

### Show a Little Skin

CHARLOTTE COFFMAN

At the mall. In the catalogs. Even on the internet. Everywhere I look, I see skin...peachskin, snuggleskin, moleskin, and so on. What is this trend to include the word *skin* in fabric names? Does moleskin have any real connection to rodents? Is peachskin edible? or aromatic? or even from Georgia? Naemeh Shirazi, a TXA undergraduate, and I did a bit of investigation on the internet, through clothing catalogs, and in textile dictionaries to arrive at these fabric definitions. You could say this is the skinny on the textile skin trade.

#### Angel Skin

- A cotton/polyester/lycra blend knit. It has nap like very fine velour on one side and is smooth without shine on the other side. It is used for sculpting dolls.

#### Moleskin

- A tightly woven, satin-weave cotton fabric with a smooth, solid surface. It may be brushed or sheared to produce a suede-like finish. In use for almost 200 years, it provides both comfort and protection in jackets, vests, pants and shirts.

#### Peachskin

- A descriptive term describing the hand of fabrics made of microfibers. These polyester fabrics have a soft, delicate surface resembling the skin of a peach. They are sometimes called faux suede.

#### Sealskin

- The skin of a seal, most often associated with the Inuit who sew the skins into parkas.
- A pile coating fabric made in imitation of seal fur. Commonly woven with cotton ground and mohair pile, though it has also been made with tussah silk or other fibers in the pile. Also known as seal plush or sealette.
- SealSkin is a registered Dupont trademark. It is a waterproof, breathable fabric made of three layers: the innermost layer is either CoolMax or ThermaStat, the middle layer is a moisture vapor transpiration membrane, and the outer layer is a polyester shell.

#### Sharkskin

- The skin of a shark that is used in clothing items such as belts and boots.
- A polyester or cotton twill fabric with surface designs intended to look like the skin of a shark.
- A wool fabric in twill weave, usually made of yarns of two colors (black and white are favorites) to create a fabric with a salt-and-pepper or mottled effect. It is used for men's and women's suits.
- A fairly lustrous cotton, linen, silk, rayon, or synthetic fabric with a sleek, crisp, pebbly surface and a chalky luster. It is most familiar as white sportswear and uniforms made of acetate or triacetate and woven in plain- or basket-weave.
- A lightweight, lycra/polyester knit fabric with ridges that reduce drag in the water. Also called Fastskin, it was designed for Speedo suits worn by American swimmers in the 2000 Olympics.

#### Snuggleskin

- A woven fabric whose right side is nylon satin; the wrong side is a cotton/polyester blend that's been brushed for softness and warmth. It is ideal for sleepwear.

## SUPPORTING INDUSTRY

### CEO of Patagonia to Speak at Cornell

The Department of Textiles and Apparel and the Cornell Council for the Arts are bringing Michael Crooke, the Chief Executive Officer of Patagonia, makers of outdoor functional clothing, to speak at Cornell. He will be here on Tuesday, April 24th and will speak at 5:00 in B-45 Warren Hall, with a reception following. The tentative title of his talk is "Committed to the Core: What Does it Mean to be an Environmentally Sensitive Company".



*The Embroiderers' Guild of America, founded in 1958, is an association of individuals interested in the art of needlework. For a list of workshops, seminars, and lectures see <<http://egausa.org/>>*

## EXPLORING FABRICS

### Drawn Thread Work

CHARLOTTE COFFMAN

Picture yourself on the hit television show *Do You Want to Be a Millionaire?* The host asks, "Is drawn thread work a) a type of lace, b) a type of embroidery, c) a pen and ink rendering of threads, or d) none of the above?" What would you answer?

Drawn thread work is a type of embroidery in which warp and/or weft yarns are drawn or pulled out of a fabric, creating open areas. Embroidery stitches are sewn along the cut edges to prevent fraying and are suspended over the open spaces as embellishment. Linen is the most popular fabric for drawn thread work but ramie, cotton, and blends such as polyester/cotton and silk/linen are also used.

Ancient fabrics containing areas of drawn work have been found in Peruvian burial sites and Egyptian tombs. The technique is well known and, over time, variations in designs and stitches have taken the name of their geographical origin. Thus, *Dresden Point Lace* hails from Germany, *broderie de Nancy* comes from Nancy, France, and *Spanish Work* is found in former Spanish colonies such as Mexico and the Philippines. You might be most familiar with drawn thread work as the elegant hemstitching on heirloom table linens.

With the current popularity of machine embroidery and new spring fashions that feature lace, openwork, and embroidery, it is not surprising that sewing enthusiasts are cutting holes in fabric and filling those holes with machine stitching. Natalie Margulis, author of a recent *Threads* article, wrote, "...the centuries-old drawn threadwork looks like the most difficult to do, yet is actually the easiest." She recommends these steps:

- Select a plain-weave fabric.
- Prewash the fabric.
- Sketch motifs on graphpaper
- Mark motif points on fabric
- Remove threads from fabric
- Match fabric thread weight and embroidery thread weight
- Apply embroidery by machine
- Press

She also recommends reading *New to Free-Motion?*, *Threads* 81: 63 and *Free-Motion Embroidery—Buttons and Beyond*, *Threads* 87: 60-65.

Whether you discover a neatly hemstitched tablecloth made by your great aunt, bring home a piece of drawn work from a trip abroad, or practice the free-motion embroidery that Ms. Margulis calls "stitching in air," you will appreciate the delicacy and elegance of this traditional embroidery technique.

#### Resources:

1. Birrell, V. *The Textile Arts*. Schocken Books, NY. 1976.
2. Margulis, N. *A New Approach to Drawn Threadwork*, *Threads*, 89: 70-75, Tauton Press, Newtown, CT. June/July 2000.
3. Tortora, P. G. and Eubank, K. *Survey of Historic Costume* (3rd Edition). Fairchild Publications, NY. 1998.

## ENHANCING SAFETY

### Engineering Influences PPE Requirements

CHARLOTTE COFFMAN

Farmers and custom applicators want to reduce operator contamination and environmental pollution when applying pesticides. Yet, they dislike wearing personal protective equipment (PPE) on hot days. One solution for reducing worker exposure AND wearing less protective clothing, is the adoption of new engineering controls, such as:

- Carbon filters on tractor cabs
- Closed transfer systems that allow pesticides to be poured from the container to the sprayer in a sealed manner
- Low level induction bowls fitted to the sprayer/mixer wagon into which pesticide can be poured and the container rinsed.
- Multiple nozzle bodies to allow for the quick change of nozzles.
- Anti-drip diaphragm nozzles
- Tank rinsing devices that allow the main sprayer tank to be rinsed in the field with the minimum of water.

Under a NY FARM SAFETY grant, pesticide applicators will be interviewed about their understanding and use of available engineering controls and personal protective equipment (PPE). Data from the surveys will be used to design an educational program about the tradeoffs between the use of engineering controls and PPE. For example, one applicator might prefer to invest in a tractor cab with carbon filter in order to wear less PPE. A second applicator might decide to wear a coverall of non-woven polyethylene over work clothes because it can be discarded after use and is less expensive than a new tractor cab. Both choices could be within the pesticide label requirements and could meet the needs of the applicators.

If you know pesticide applicators in your counties who would be interested in participating, please contact Andrew Landers (Tel: 607-255-2030; Email: [ajl31@cornell.edu](mailto:ajl31@cornell.edu)) or me (Tel: 607-255-2009; Email: [cwc4@cornell.edu](mailto:cwc4@cornell.edu)). Responses will be coded to ensure privacy and confidentiality and, of course, participants may withdraw from the study at any time.

## EMERGING TECHNOLOGY

### Body Scanning Comes to Cornell

FRAN KOZEN

The term "body scanning" might remind you of science fiction, but in reality it is an exciting new technology enabling development of customized clothing, virtual try-on of clothing, and research on sizing and clothing fit. Two-dimensional measurements taken with a tape measure give limited information about body curves and shape variations. Body scanners provide three-dimensional data that can be of much more help in designing and fitting garments. Textile/Clothing Technology Corporation [TC]<sup>2</sup> and a partner plan to install body

scanners at malls where consumers could be scanned. Measurements would be kept in a confidential database, accessible by the consumer for use in identifying the best-fitting garments from partner retailers and brands, or for ordering made-to-measure garments. Several firms are able to send body scanner data directly to patternmaking programs to enable manufacture of custom fit clothing. If such technology were to become more widespread, it would be possible for the ordinary shopper to order custom clothing at reasonable cost, or to visualize a particular garment at different degrees of tightness, or in different sizes on their scanned figure.

You might have heard about the Lands' End My Virtual Model Tour that visited various sites in New York in the late fall. Lands' End used a personal body scanning system to take measurements, then creating virtual models that can be used to "try on" clothing on-line. Not only did Lands' End introduce many consumers to the on-line virtual model, but they also gathered measurements for several thousand people that they can use to check the accuracy of their sizing systems. Most customers have to be content to enter their two-dimensional measurements into the My Virtual Model section of the Lands' End web page, but the next frontier is likely to integrate more use of body scanning data. J.C. Penney, another user of My Virtual Model virtual try-on technology for [jcpenny.com](http://jcpenny.com), expects to continue to explore new technologies in a continuing effort to reduce returns from customers.

Most body scanning systems now require subjects to remove clothing or wear a tight-fitting body suit. Battelle Pacific Northwest National Laboratory has invented high-speed body scanner that will obtain measurements through street clothing, eliminating the need for a changing room, and speeding up the measurement process.

A Cornell alumna recently donated money to the Department of Textiles and Apparel to purchase the Vitus smart 3D body scanner, distributed by Lectra. This system uses infrared beams to scan the body from four corners, moving from the head down in 12 seconds. The acquisition positions the department to conduct state-of-the-art research on sizing, pattern-making, and mass customization using the Lectra computer assisted design (CAD) system, made-to-measure software, and the body scanner. Susan Ashdown and Suzanne Loker are very busy planning research using the scanner, and some students have already begun to make use of it. One idea is to make the body scanner available to apparel firms for a look at the differences between their garment measurements and actual body measurements of consumers wearing a selected size. As they work with the scanner and related software, they expect to find a number of ways to involve apparel firms in use of this exciting new technology.

## BROWSING WEBSITES

### PENpages Regroup

CHARLOTTE COFFMAN

<<http://www.penpages.psu.edu/>>

Several years ago, the College of Agricultural Sciences at Pennsylvania State University posted PENpages, a website with full-text information related to the agricultural sciences, human nutrition, aging, family, community development, and consumer issues. Today, the College is no longer developing specific PENpages. Instead, the former PENpages documents have been assimilated into the College of Agricultural Sciences web space that hosts over 10,000 pages of information.

To use the current site, enter <<http://www.penpages.psu.edu/>> and click on Search. Select PENpages, the College of Agricultural Sciences, or both and enter your topic into the search box. When I entered the term *protective clothing*, I found 46 entries with titles such as Use Pesticides Safely and Household Chemicals Can Pose a Health Risk. When I searched on the word *textile*, I discovered 144 entries with titles such as Removing Pen Ink and Pencil Stains, Sunlight Degradation on Drapes, and Care and Storage of Quilts.

An example of their youth program publications is the enclosed Fashion Revue. It is the latest in the 4-H Textile Science series prepared by Jan Scholl, Associate Professor of Agricultural and Extension Education at Penn State.

#### EXTENSION FACULTY AND STAFF

	Phone	E-mail
<b>Charlotte Coffman</b> -Textiles and Apparel, Youth and Safety Issues	255-2009	cwc4@cornell.edu
<b>Katrina DiTella</b> -Water Quality, Septic Systems, Home*A*Syst	255-1943	kld20@cornell.edu
<b>Fran Kozen</b> -Textiles and Apparel, Industry Outreach	255-0465	fhk2@cornell.edu
<b>Ann Lemley</b> -Department Chair, Water Quality, DEL	255-3151	atl2@cornell.edu
<b>Suzanne Loker</b> -Textiles and Apparel, Industry Outreach	255-6204	sl135@cornell.edu
<b>Elizabeth Davis</b> -Youth Programs, Workshop Coordinator	255-3427	ed55@cornell.edu
<b>Paula Smith</b> -TXA News Production Manager -TXA Loan Library	255-3196	pjs15@cornell.edu txa_extn-mailbox@cornell.edu

Reference to commercial products and services is made with the understanding that no discrimination is intended, nor endorsement implied.