

TEXTILES AND APPAREL NEWSLETTER

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Announcing

Welcome Annelies Heidekamp

The Department of Textiles & Apparel welcomes Annelies Janine Heidekamp, Extension Associate in the Water Quality program. She received her Master of Science (2003) at the University of Groningen in the Netherlands after completing her study of chemistry. She specialized in biochemistry.

Annelies' master thesis was fundamental research on the Baeyer-Villiger enzyme EtaA from *Mycobacterium tuberculosis* and her Biochemistry colloquial work investigated the corona virus SARS. Her thesis results were published in the Journal of Biological Chemistry. Her experience with water matters began in January of 2004 with an internship at Bioclear BV in Hoogkerk (The Netherlands). She put together a broad report concerning European water laws and the implementation of those laws in the Dutch system. Surface water quality and microbiological safety were the two key issues.

Annelies will work with Dr. Ann Lemley to set up an interactive water quality website. The first hurdle was to post all previous water quality fact sheets in PDF-format and to redesign the web site where they were located (<http://www.cce.cornell.edu/factsheets/wq-factsheets/index.htm>). Take a look at the updated site and check out Annelies' first article for TXA News on pp. 3.

In her free time Annelies enjoys physical exercise and she is currently in training for the YMCA triathlon. She also loves to watch movies and her favorite TV shows *24*, *Charmed*, *Gilmore Girls* and *Desperate Housewives*.

ENGAGING YOUTH

Go Figure! Teen Opportunity

CHARLOTTE COFFMAN

The last issue of *TXA News* introduced readers to **Go Figure!**, a set of web-based activities that engage young people in science, technology and math. Forms were enclosed to encourage youth to share data that will be used to establish activity databases. Thanks to teens (and helpful 4-H educators) from ten counties who responded! We now have about 100 entries, but still need 200 more! If you need hard or electronic copies of those forms, please contact me at cwc4@cornell.edu.

In addition, we are recruiting up to 20 teens to help collect data, test the activities, and evaluate the website. They should expect to invest about three hours over the next six months. If you know interested teens, please send their names, mailing addresses, email addresses, and telephone numbers. I will contact them for further discussion. We have several volunteers but would like to recruit a few more by mid-February.

CONCERNING CONSUMERS

Custom Clothing at Popular Prices

FRAN KOZEN

Do you struggle finding the perfect pair of pants? Does your husband fuss about the fit of his dress shirts? It may surprise you to learn that you can have clothing custom made for you at very reasonable prices through the JC Penney, Target, and Lands' End websites. All three retailers partner with Archetype, a software firm, to make placing an order for a garment to fit body specifications and style preferences easy. Archetype manages the process from order to delivery of finished garment. This is mass customization at work: the software generates an individual pattern for each order, but the garment is manufactured using mass production technology. Garments are delivered in 3-4 weeks.

Each retailer offers a selection of basic garments for men and women that appeal to a wide customer base. Customers select a fabric, a silhouette, and style features such as collars, pockets, leg shape, or waistband. All three firms guide the customer through body measurements and body shape characterization. The data requested are limited body measurements and some clothing size information, some of it rather odd, like shoe size for men ordering pants, and bra size for women ordering pants. These details help describe body type. Customers also select some body shapes such as tummy, seat, chest, and thigh with the help of illustrations. Archetype inputs data to a mathematical model to create an appropriate pattern. The model is prepared to deal with very odd

measurements, although each retailer does warn that a very small minority might be impossible to fit. Returns of garments that don't work are accepted unless they have been monogrammed. Measurements are kept for quick reordering, at which point adjustments can be made to perfect fit or to accommodate weight gain or loss.

Target offers just three styles: women's stretch denim jeans (\$34.99), men's cotton stain resistant chinos (\$34.99), and men's cotton stain resistant dress shirts (\$44.99) at <http://custom.target.com>. Their color offerings are quite limited within each style, but they cover the most popular choices. Prices are \$10 to \$20 above off-the-rack prices for the same garments.

JC Penney does not make it easy to locate custom clothing from their website www4.jcpenney.com. One route is to select men's clothing, then select custom fit from the menu of offerings to get to both men's and women's custom clothing. JC Penney offers big or plus sizes, and has a more extensive fabric selection for shirts and a range of colors for pants. Customizable items are men's dress shirts (\$49 to \$55), depending on size), men's cotton stain resistant twill pants (\$49 to \$55), and women's cotton stain resistant twill pants (\$44 to \$54). Tips on style selection, how to measure, or how to determine body shape, are offered throughout. Prices are higher than standard fit by \$10-\$20.

Lands' End has been selling custom clothing the longest of the three retailers at www.landsend.com. While their base prices are slightly higher and prices increase depending on fabric and features, Lands End offers a lot of choice. For men, Lands End sells dress shirts at prices from \$49 to \$165 depending on fabric, dress pants in six fabrics starting at \$69, cotton chino pants in three fabrics from \$59, jeans for \$54, and an outerwear fleece jacket that starts at \$69, but increases in price with each additional feature selected. Offerings for women are more limited, but include jeans (\$54 regular, \$62 plus sized), washed chinos (\$59 regular and \$70 plus), dress blouses in three fabrics (\$49-\$59 depending on fabric), and the same outerwear fleece offered to men starting at \$69. They also provide plenty of assistance throughout the process, with many illustrations and pop up information boxes. Pants are priced about \$20 above stock items.

So, if you routinely try on 15 pairs of jeans before you find one that fits, perhaps it is time to order custom jeans from one of these progressive retailers. Check them all out before you order, as fabrics and style features vary across the three. Just think how easy it will be after the first order!

Sources:

- www.landsend.com
- www4.jcpenney.com
- <http://custom.target.com>
- www.archetype-solutions.com

Water Quality in Airplanes

ANNELIES HEIDEKAMP

During the summer of 2004 the Environmental Protection Agency (EPA) tested the water quality on board planes as part of enforcement activities. They tested galley water taps, water fountains and lavatory faucets on 158 aircraft at 7 airports. Twenty aircraft (12.6 %) tested positive for total coliform bacteria and two of these aircraft (1.3%) also tested positive for *E.coli*. Both total coliform and *E.coli* are indicator organisms, which signify that other disease-causing organisms could be in the water supply and can have a negative health effect. Certain strains of *E.coli* (most notably O157) can be the cause of severe gastroenteritis illnesses.

In a follow-up study in November 2004, seventeen percent of 169 aircraft from 20 different airports tested positive for total coliform bacteria. So it is shown this is a persistent problem. In November 2004, twelve national airlines announced a commitment with the EPA to implement new aircraft water testing and disinfection protocols.

The reason most airlines give for the contamination of the water supply is the bad quality of water at overseas intake points. The subsequent disinfection is not adequate at the moment to prevent the contamination.

The EPA is negotiating with two more big airlines and several charter and small carriers to introduce better protocols. New regulations will probably be issued in the next 12-18 months. In the meantime, people with compromised immune systems or infants can ask for bottled water or bring their own water as an extra precaution.

The airlines that have committed to protocol changes are: Alaska Airlines, Aloha Airlines, American Airlines, America West, ATA Airlines, Continental Airlines, Hawaiian Airlines, Jet Blue, Midwest Airlines, Northwest Airlines, United Airlines and US Airways.

For further information:
<http://www.epa.gov/airlinewater/index.html>



The first recorded sale of nylon hosiery was in NYC stores on May 15, 1940

RECALLING TRADITIONS

If Ironing Boards Could Talk

CHARLOTTE COFFMAN

Maybe it was once considered state-of-the-art, even attractive, but now it is dated and cumbersome. It has a wooden top supported by a heavy, curved iron leg. The top is covered with layers of newspapers held in place by a stained cloth cover. The leg is painted an ugly pink and stamped with the words *Troy Laundry Machinery Co. Ltd.* For decades it served Cornell students as they pressed their flat-felt seams and ironed their end-of-semester creations. Now, the old ironing board is being replaced with snazzy steam beds. As it lumbers out the door, one can't help but wonder what stories it could tell about fabric innovations, changes in fashion, and, yes, student creativity and anguish. Even in the *TXA News*, ironing boards do not talk, but we can explore its past by researching its manufacturer and reading the newspapers buried under its cover.

The Troy Laundry Machinery Company, Ltd., manufactured laundry equipment for the famous Troy laundries in Rensselaer County. Their appliances include washers, wringers, starchers, dampners, and ironers. Salesrooms were found in NYC, Boston, and San Francisco as well as in London, England and Berlin, Germany. Laundries proudly carried the name Troy as far away as China. The Company had two sites. A western manufactory was located in Chicago, IL. The eastern plant was incorporated in 1881 and located in Troy, NY, presumably the site that produced the TXA ironing board.

Issues of Women's Wear Daily, dating from December 1948, were used as a protective pad for the ironing board. These articles provide a glimpse into the textile and apparel scene of that period. A lot of space was devoted to gloves. Headlines announced:

- *Wool Glove Sales Off Due to Mild Season*
- *Pseudo Straw, Beads Trim Handsewn Spring Fabric Gloves.*
- *Knitted Gloves Holds Three-fourths Gain*

News about nylon hosiery was even more prominent. Seamless stockings were all the rage and a new style called "Demi-toe" minimized toe reinforcement for wearing with low-cut shoes. "Becoming Colors" were listed as bewitching, willow, winsome, and temptation. Hanes, Berkshire, As You Like It, and other brands sold for \$9.70 - \$12/pair – not a purchase to be made in haste. Fabric prices were also relatively high considering the income of the average family in the 1940s. Silk prints were advertised from \$2.95 to \$3.95 per yard. Screen-printed silks sold for as much as \$8/yard. Sheer wool dress weights were priced from \$3.25 to \$3.95, with gray being the best seller followed by cinnamon and orange.



These dresses (above) sold for \$10 and were advertised as affordable, useful, easy-to-fit, everyday dresses.

The Federal Trade Commission was active then, proposing to make it an unfair trade practice to sell or distribute any handkerchiefs as “men’s handkerchiefs,” unless these were at least 16 inches square in the finished state.

Fiber science was touted as the consumer’s friend. Cluett, Peabody & Co. opened a new research laboratory equipped with such facilities as *vacuum, hot and cold water, sound-proofing, air-conditioning, moisture control, gas, compressed air, and employee safeguards, such as showers and other first aids in case of accidents.* Research focused on laundry methods, dyeing, and resin applications to rayon goods. The US Finishing Company advertised their crease-resistant finish for spun rayons, linens, and cottons as a remarkable “builder-upper” that coated each fiber with an invisible film of crush-resistance, improved fabric hand, and refreshed itself after being hung up overnight.

And, finally, one familiar announcement: *The Make It Yourself With Wool* contest, sponsored by the Women’s Auxiliary of the National Wool Growers’ Association, will be held in San Antonio, TX. This contest is still in existence and New York contestants are featured annually in this newsletter.

Resources:

1. NYRENSSE-L Archives
<NYhttp://archiver.rootsweb.com/th/read/NYRENSSE/2003-06/1056139068>
2. Weise, M. A. Troy’s One Hundred Years 1789-1889, William Young, Troy, NY. 1891.
3. *Women’s Wear Daily*, December, 1948.

EMERGING TECHNOLOGY

Textile Fibers from Feathers?

FRAN KOZEN

Nylon and polyester are mainstays of the synthetic fiber industry, and they are petroleum-based. Petroleum price increases over the past two years have made alternative raw materials very attractive, and the list of potential alternatives includes some unexpected items. Remember polyester by Wellman, advertised as made from recycled plastic milk jugs? Ingeo, an attractive new fiber introduced commercially two years ago is made from corn, an annually renewable resource. (TXA News Feb. 2004, Feb. 2003). Now research scientists at the USDA are looking at the 2.5 billion pounds of feathers produced by poultry farmers annually as raw material for fibers. The feathers contain protein like wool or silk, and can be processed to make a fiber with properties somewhat like nylon. So, keep your eyes open for products. You never know what you might be wearing next!

Source:

Fiber’s Future Down on the Farm, December 14, 2004.

BROWSING WEBSITES

EPA Spanish Website

< <http://www.epa.gov/espanol> >

The U.S. Environmental Protection Agency has launched a new web site that compiles EPA’s Spanish language materials on a wide variety of areas. The site was developed through a series of focus groups to respond to the environmental needs and interests of Hispanics and includes information on lead poisoning, asthma triggers, and proper management of pesticides. The site also offers educational resources for students and teachers, information about EPA grants, small business opportunities, and environmental jobs at EPA.

EXTENSION FACULTY AND STAFF		
	Phone	E-mail
Charlotte Coffman	255-2009	cwc4@cornell.edu
-Textiles and Apparel, Youth and Safety Issues		
Annelies Heidekamp	255-1943	ajh59@cornell.edu
Water Quality, Septic Systems, Home*A*Syst		
Fran Kozen	255-0465	fhk2@cornell.edu
-Textiles and Apparel, Industry Outreach		
Ann Lemley	255-3151	atl2@cornell.edu
-Department Chair, Water Quality, DEL		
Suzanne Loker	255-6204	sl135@cornell.edu
-Textiles and Apparel, Industry Outreach		
Paula Smith	255-3196	pjs15@cornell.edu
-TXA News Production Manager		
-TXA Loan Library		txa_extn-mailbox@cornell.edu

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