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## Announcing

### NEW Courses for Career Explorations 2004

CHARLOTTE COFFMAN

TXA will offer or collaborate on two new courses as part of the annual 4-H Career Explorations, June 30-July 2. Carefully read the materials sent to your county from the 4-H Office and encourage your teens to join us.

#### Click, Click, Click

The Bureau of Labor Statistics reports that eight out of ten of the fastest-growing occupations are in information technology (IT). This course offers hands-on experience with technology and IT applications. Teens will use Photoshop Elements to create a collage from digital images that they photograph around campus or scan from magazines. They will learn how the 3-D body scanner is used in research and take home a copy of their personal scan. They will explore computer-aided design as a tool for clothing design.

#### Woven Pots, Rope Knots, and Dye Spots

This course supports a new Horticulture-TXA project, Plants and Textiles — A Legacy of Technology (see pp. 2) and is sponsored by the two departments. Teens will learn traditional technologies used in New York to convert plant materials into textile or textile-related products. They will then go online to discover how those products are made today. Activities may include making baskets, paper, and mats as well as using indigo to dye fabric. This is a project “in progress” so teens will be asked to rate their interest, satisfaction, and learning and to suggest modifications. Based on their evaluation, the project will be modified and shared with teens around the state through museums, historical societies, and 4-H.

## ENGAGING YOUTH

### 2003 NYS Make It With Wool Winners

JEAN BONHOTAL, 4-H Volunteer, Oswego County  
ANN KELCHLIN, 4-H Volunteer, Schoharie County  
Mary Kelly, NYS Sheep and Wool Growers Association

The New York State Make it Yourself with Wool Contest was held October 18, 2003 at the 31st Annual Sheep and Wool Festival in Rhinebeck, NY. This setting was so successful that the event will be held there again next year, October 16, 2004. Listed below are the entrants and the winners who will represent NY at the national contest in Washington, DC. Congratulations to all!

#### Pre-teens

Daniel Fancher, Oswego County  
Will Fancher, Oswego County  
Bryan Kelchlin, Schoharie County

#### Juniors, ages 13-16

Rachel Kelchlin, Schoharie, WINNER  
Anna Shippee, Washington County  
Mike Cambareri, Oswego County  
Kim Ramona, Ulster County

#### Adults, age 25 years and older

Ellen Haines, WINNER  
Barb Young

### Simple Gifts Televised

CHARLOTTE COFFMAN

Public Television recently broadcast *The Forgetting: Portrait of an Epidemic*, a documentary about Alzheimer's disease, and a panel discussion entitled *The Help You Need*. WSKG-TV in Binghamton, NY followed up with *Getting Ahead of Alzheimer's*, a look at local programs that included Simple Gifts. The footage included members of the Fur & Feathers 4-H Club (Tompkins County) sewing balloon balls and making squeezies. Simple Gifts is also described on the WSKG website, <http://www.wskg.com/>

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*Women in the Army Reserves are rejecting traditional underwear and requesting sports bras. The military is listening and promises to make sports bras standard issue when reservists are mobilized.*



—Washington Whispers, U.S. News & World Report, February 2, 2004.

### Plants & Textiles — A Legacy of Technology

CHARLOTTE COFFMAN

In October, 2003, the Departments of Horticulture and TXA received joint funding for a three-year effort to involve young people in the development and use of a project that explores technology and links 4-H to local museums. Marcia Eames-Sheavly has involved Cornell students in background research and activity development. High school students will also assist in this process through a Focus for Teens course offered as part of Career Explorations 2004 (p. 1).

Traditional technologies that convert New York plant materials into textiles will be adapted to create experiential activities for teens. The term 'textiles' includes fibrous products such as cloth, paper, batting, baskets, cordage, and nets. Potential plants are indigo (dye), cat tails (batting), milk weed (candle wicks), flax (cloth), dogbane (cloth), teasels (cloth-finishing tool), and lavender (fragrance). Traditional materials, technologies, and products will be compared to their modern counterparts. For example, the Iroquois wore tightly woven mats made from dogbane as protective armor. Today, police officers wear bullet-proof vests made from Kevlar fibers.

We will focus our efforts this year on developing, testing, and revising activities. Once the activities are complete, two traveling trunks of educational materials will be assembled and available on loan. In the second year, two regional workshops will be offered to 4-H and museum educators and volunteers. Trainings will incorporate youth development concepts, engage participants in hands-on activities, demonstrate the traveling trunk and online resources, provide time for museum staff to explain their needs and programs, and investigate potential youth-museum partnerships.

Evaluation will have extension and research components. The extension evaluation will measure participants' understanding of the technologies, level of satisfaction with the project, and interest in working with museums. The research component will identify the factors that encourage youth to take an active role in their own activities and the factors that make working together beneficial for both 4-H and historical societies/museums.

## CONCERNING CONSUMERS

### Clothes Care Research Center

FRAN KOZEN

The Clothes Care Research Center (CCRC) has been formed by two universities and five apparel and consumer product companies in the United States to help identify the best in-home cleaning and maintenance practices for apparel fabrics. The motivation for the new alliance is the proliferation of new fibers and finishes currently reaching the market. CCRC expects to make its research widely available, enabling manufacturers to put the best care labeling information on garments.

—*Wearables,*

[http://wearablesbusiness.com/ar/apparel\\_apparel\\_leaders\\_launch/](http://wearablesbusiness.com/ar/apparel_apparel_leaders_launch/)

### What's New in the Laundry Room?

CHARLOTTE COFFMAN

*Today is Monday, Today is Monday, Monday wash day,* begins a familiar children's song. Americans have long since made any day (and sometimes every day) their wash day, but new equipment provides even more options.

#### Clothes Washers

Almost any washer will clean your clothes if properly used, but consumers do have real choices in energy and water use, capacity, noise, features, reliability, and cost. As of January, 2004, the maximum amount of energy that a new washer can use has been reduced by about 25 percent. This is good news for the long run, but many existing machines already use less energy than mandated by the new standards. Nonetheless, using the most energy-efficient washer can save consumers several hundred dollars over the machine's lifetime. If you are in the market for a new washer, read the EnergyGuide label that gives efficiency ratings and annual operating costs. Be aware that the 2004 ratings are calculated differently than earlier ratings. The new tests are based on fewer loads of laundry per year in hot and warm water and more loads washed in cold water. Also, the hot water temperature is lower than in the past. Finally, the new ratings are based largely on the amount of moisture removed from laundry during the spin cycle. These are realistic changes, but consumers will likely encounter pre- and post-2004 labels at the same appliance store. Shoppers must remember that new and old labels can not be compared.

Front-load washers out perform top-loaders. They use less water and energy, have high spin speeds, are gentle on clothing, accommodate large loads, and are quiet to operate. The bad news is that front loaders cost about \$400 more than a top loaders. Whatever your budget, *Consumer Reports* data shows that these features are worth the money: automatic temperature control, automatic bleach and detergent dispensers, and stainless-steel tubs. *Consumer Reports* does not recommend paying for extras such as four or more water levels, dozens of fabric cycles, porcelain tops, electronic touch pads, and internal water heaters.

#### Clothes Dryers

Dryers are simple machines, with fewer options and longer lives. The primary recommendation is to purchase a dryer with a moisture sensor. This is important because over drying not only damages clothes but also adds to your utility bill. Moisture sensors are found on the more expensive models, usually priced at \$350 or more. *Consumer Reports* suggests that the smart consumer will forego specialty cycles, electronic touch pads, and porcelain tops. A stainless-steel drum does NOT add to the performance of a dryer as it does for a washer.

#### Bottom Line

If you are looking for a new washer or dryer, review your needs and consider the options discussed above. Then check out the brand and model comparisons in *Consumer Reports*. Finally, compare appliances online or in stores. You might discover that your old machine can still do the job. Consider repairing your washer or dryer if the cost is \$140 or less. The rule of thumb is do NOT repair the machine if the cost exceeds half the price of a new one.

#### *Resources:*

1. *Consumer Reports. Washers: Loads for Less, p. 38-41; Dryers: Drum Majors, p. 43. Consumers Union, Inc., Yonkers, NY. August, 2003.*
2. *Maytag. <http://www.maytag.com>*
3. *Sears. <http://www.sears.com>*
4. *Whirlpool. <http://www.whirlpool.com>*

## EXPLORING FABRICS/FIBERS

### Ingeo

FRAN KOZEN

A year ago Charlotte Coffman reported on Federal Trade Commission approval of a new polymer, PLA, manufactured by Cargill Dow from corn or sugar beets. PLA has hit the market as a textile fiber, trademarked Ingeo. Ingeo is currently being produced in Japan and is soon to be made by Fiber Innovation Technology in Tennessee. Ingeo is renewable, biodegradable, and possesses desirable physical properties for clothing, bedding, carpets, furnishings, and personal care products. You can be one of the first to try it: Faribault Mills is offering blankets woven of Ingeo or from a wool/Ingeo blend. Find them at [www.ingeoblankets.com](http://www.ingeoblankets.com).

### Spacer Fabrics

CHARLOTTE COFFMAN

Spacer fabrics have grabbed headlines for the last couple of years because they have unique physical properties, offer an abundance of surface patterns, and are used in diverse end products. Spacers are composed of two outer textiles joined together and kept apart by an insert of materials, mostly monofilament yarns. This creates a ventilated "space" of 1.5 to 60 mm of air, allowing heat and moisture to escape. Spacer fabrics are breathable, resilient, flexible, and soft. They come in a variety of weights, colors, textures, and designs. Other properties can be added, including anti-microbial, anti-mildew, anti-static, flame-retardant, absorptive, water-repellent and abrasion-resistant.

Spacer fabrics are produced on warp-knitting machines that work on the principle of rib-knitting technology with two needle rows. The size of the gap between the two faces and the rigidity of the finished fabric are determined by yarn choice and knitting-machine settings. This simple concept dates back 135 years when Matthew Townsend applied for a U.S. patent to knit mattresses on a two needled hand frame with interconnecting threads.

The current rise in spacer popularity results from new developments in healthcare, safety, military, automotive, aviation, and apparel applications. The Textile Research Institute in Germany promotes spacer fabrics with fine-count polyester yarns for alleviating bedsores and improving the comfort of wheelchair users. Textiles can

be produced with high or low pile and small or large spaces to provide different degrees of crush resistance making them ideal for use in car seats.

A major market is functional clothing, especially sports-related items. Spacer fabrics are used in sports shoes because they are lightweight, high bulk, springy, washable, and a superior substitute for laminated foam. Gehring Textiles in St. Johnsville, NY, makes a spacer fabric used in sliding shorts for baseball players. Some analysts predict that these fabrics will replace neoprene in sports medicine applications such as shoulder pads, and knee/elbow protectors.

Spacers can be used in either the traditional cut and sew production methods or in conjunction with molded cups. Heathcoat Fabrics, a UK firm, recently launched a collection of bra fabrics expected to replace foam materials and foam composites. Spacer fabrics are also being tested for possible use in outerwear as well as patterned simplex fabrics, fine nets, and ultrafine fabrics for underwear and sportswear.

#### Resources:

1. *Apparel Resources.com. New Spacer Fabrics Very Bracious*, <http://www.apparelresources.com/defaultnextsix.asp?msg=3838&cod=&nam=>
2. *Gehring Textiles*. <http://www.gehringtextiles.com>
3. *Textile News and Industry Analysis. Breathing Room, Knitting International, World Textile Publications Ltd., February, 2002.* <http://www.inteletex.com/FrontPageFeatures.asp?PubId=27&NewsId=191>

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