

# N&R SUNDAY

May 15, 2011

Greensboro, North Carolina

## THE PROCESS

On average it takes about 23 bottles to make one graduation gown. Unwanted gowns are recycled into new fabric.



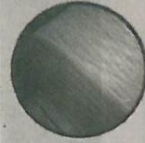
1. Recycled plastic bottles are processed to remove impurities such as labels and caps.



2. The bottles are chopped into fragments called "flakes."



3. Flakes are melted and solidified into uniform pellets called "chips."



4. Chips are melted again and extruded into continuous filament yarn.



5. The yarn is woven, dyed and finished

Source: [www.oakhalli.com](http://www.oakhalli.com)



## ENVIRONMENTAL ADVANTAGES

- Yarn is produced using 100% post-consumer plastic bottles.
- CO2 gas emissions are reduced by 54.6% in the process of manufacturing fabric from plastic versus virgin polyester.
- Petroleum usage is reduced more than 52% by using thermal recycled energy.

## Graduates wear gear made from plastic

■ Greensboro-based manufacturer Unifi turns recycled plastic bottles into a yarn, which is used to make the gowns.

By DONALD W. PATTERSON  
Staff Writer

When Duke's 4,500 graduates enter Wallace Wade Stadium this morning for commencement, they'll be wearing the traditional black caps and gowns, but the philosophy behind them will be green.

This year, the university's academic regalia will be made from recycled plastic bottles.

"We're going to save about 10,000 bottles from the landfill," Tom Craig, merchandise manager for Duke Stores, said of the change. "It was an easy decision for us to make."

Thanks to a product developed by Greensboro-based yarn maker Unifi Inc., thousands of graduates across the state and nation will be attired in recycled water and

## WANT TO KNOW MORE?

To learn more about Repreve, visit [www.repreve.com](http://www.repreve.com)

soft drink bottles this month.

Other North Carolina schools adopting the new caps and gowns include GTCC, UNC-Chapel Hill, N.C. State and Wake Forest.

The product, a recycled yarn called Repreve, will not only help the environment — it takes 23 bottles to make one gown — but analysts call it one of the factors that helped Unifi turn around financially.

Between 2000 and 2010, the company lost nearly \$420 million and laid off 2,800 workers.

MARGARET BAXTER/News & Record

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# Unifi

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But last year, the company turned a profit of nearly \$11 million and expects to make money in fiscal year 2011 as well.

"They have seen the worst," said Bryan Hunt, managing director of high-yield research at Wells Fargo Securities in Charlotte. "I am confident this company will be around for a long time."

And company officials say Repreve will play an increasingly important role in the company's future.

Since its introduction in 2006, Repreve has grown from a single recycled polyester fiber into a family of sustainable products. One line, introduced in 2009, is made entirely of recycled bottles.

In the last two years, the company says, more than 247 million plastic bottles have been recycled into Repreve.

By 2012, the company expects to recycle more than 400 million bottles at its new \$8 million Repreve Recycling Center in Yadk-ville.

"We know that the green movement is here to stay," Roger Berrier, the company's president and chief operating officer, said at the center's grand opening on May 4. "... It's our goal to become the world's leader in providing recycled fibers."

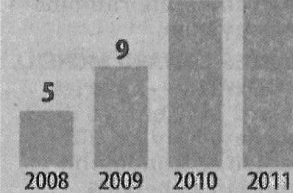
Unifi purchases the plastic bottles from an unidentified supplier, who cleans them and chops them into flakes.

At the recycling center, the company melts the flakes and transforms them into uniform pellets called chips. These are remelted and extruded into yarn, which can be used to make fabric.

Repreve can be used to make clothing, upholstery,

## GLOBAL VOLUME GROWTH OF REPREVE

(In millions of pounds)



Fiscal year ending in June.  
Source: Unifi, Inc.

TIM RICKARD/News & Record

drapes, socks, tote bags, zipper tapes, bedding, product labels, banners and signs.

Customers include Hagar, Polartec, BlueAvocado and two of the nation's largest academic regalia companies — Herff Jones in Champaign, Ill., and Oak Hall Cap & Gown in Salem, Va.

"It's taking off," Joseph D'Angelo, president of Oak Hall, said of his recycled products. "It's just the green movement. Every college in the country is trying to do something green."

Duke, which gets its caps and gowns from Oak Hall, held off on the recycled regalia until this year.

"Before, it was not as nice a product," Craig said. "Now you can't tell the difference. Now they have the quality under control."

UNC-CH made the switch this year also.

The change gave the university the chance to improve the color of its gowns. In the past, they had been aqua, which drove fashion designer Alexander Julian, a Chapel Hill native and Carolina graduate, crazy.

Julian got permission from Chancellor Holden Thorp to improve the color and began working with Oak Hall on what he called a True Blue.

He also added some fashion improvements, including white piping along the yoke and two white panels in the front for what the university calls "the first designer regalia in the country."

Julian had some added incentive to make the changes. His son, Will, graduated last weekend.

"I think they're awesome," Will Julian said in a news release, talking about his father's efforts. "He's got some skills."

Gowns made of Repreve cost a little more than the traditional ones.

The model used at UNC-CH cost \$54.99, or \$5 more than last year's version.

Officials at Wake Forest, which began using the Repreve caps and gowns last year, said the switch went smoothly.

"We didn't get any complaints about the look, the quality or the price," said Buz Moser, the university's executive director of business services. "On graduation day, (students) don't come up and say, 'Thanks for a great cap and gown.'"

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PHOTOS BY JOSEPH RODRIGUEZ/News & Record

GTCC graduate Lavorice Smith gets a hug from his son, Xavier, after commencement Friday at the Greensboro Coliseum. "I don't know where I'd be today if I hadn't become a father," says Smith. "My son reminded me what love was all about."