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On THE COVER

Bicycles line a rack on campus. What could be more collegiate than this "summertime" photo by Wendy P. Osborne?

The State University of New York College of Environmental Science and Forestry offers a diverse range of accredited programs and degree options in chemistry, construction management and wood products engineering, environmental and forest biology, environmental resources and forest engineering, environmental studies, forest resources management, forest technology, landscape architecture, and paper science and engineering.

The College's mission is to be a world leader in instruction, research, and public service related to: understanding the structure and function of the world's ecosystems; developing, managing, and using renewable natural resources; improving outdoor environments ranging from wilderness, to managed forests, to urban landscapes; and maintaining and enhancing biological diversity, environmental quality, and resource options. As such, ESF has maintained its unique status within SUNY's 64-campus system as one of only five specialized colleges and one of only eight doctoral-granting institutions.

ESF takes affirmative action to provide equal opportunity for all people and to build a campus community that reflects a wealth of diversity.

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Evolving Environmental Science

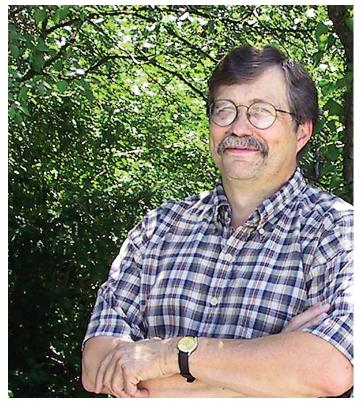
By James M. Hassett

The college is initiating a new bachelor of science program in environmental science, and Provost William P. Tully asked me to serve as its first program director. That request caused me to think about the general issue of environmental science, and, with the help of the provost and several faculty colleagues, how to translate those thoughts into a high quality undergraduate program.

Traditional academic disciplines are characterized by their history, the presence of unifying concepts, and the set of problems the people trained in the discipline work on¹. Environmental science has not yet evolved into a discipline, and so curriculum design issues are less well defined than for a more traditional program. Still, I think any environmental science curriculum should acknowledge three themes: impetus, epistemology and scale.

By impetus, I mean the program should address the reason environmental science is evolving. Ask yourself this question: When the definitive history of the 20th century is finally written, what will be the most important theme? At first blush, one might think of the struggle of the democracies versus totalitarianism, the rise of terrorism, space exploration, or the advent of the nuclear era. I posit a different response: I suggest the 20th century will be known as the first time humans managed to affect their environment on a global scale. As J. R. McNeil has written, "The human race, without intending anything of the sort, has undertaken a gigantic uncontrolled experiment on the earth"². Experimental results abound: depleted fisheries, global warming, the ozone hole, to name a few.

Now, how does one study environmental phenomena? Traditional experimental design methods are difficult to apply to largescale systems that are non-random and impossible to replicate: the problem of global warming is very different than the problem of determining the efficacy of a drug therapy by a double-blind clinical trial. This illustrates the problem of epistemology. Karl Popper³, the eminent philosopher of science, argued that science advances by falsification, i.e., proponents of a theory generate an unambiguous prediction, and an outcome is compared to the prediction. How does one pose a falsifiable prediction vis-à-vis global warming? Popper's student Imre Lakatos coined the phrase "paradigm shift" to describe the acceptance of overwhelming evidence in support of a phenomenon, while Maureen Christie described the role of critical observations in reaching scientific consensus about complex problems⁴. Interestingly, both Lakatos and Christie used environmental problems as the basis of their philosophical investigations.



James M. Hassett

I suspect the political debate about global warming (and other environmental issues) is as rich as it is precisely because of the philosophical difficulties as to what constitutes proof of the existence of a complex phenomenon.

Environmental problems exist at many scales, and that should be the third theme of any environmental science program. I've already mentioned problems at the global scale, but environmental scientists should be able to deal with problems at more local scales. Consider the problem of childhood lead poisoning, still an important issue in Syracuse and other cities with old housing stock. What is the appropriate geographical area over which a child is exposed to lead? Are the sources of lead uniformly spread throughout the area? What are the appropriate lead abatement and removal strategies? Maria Mastriano, one of my recent M.S. students, looked at blood lead levels in children living in Onondaga County residences. Some of the housing units were subjected to lead abatement activities; Maria compared the blood lead levels in children pre- and post-abatement with children in unabated housing units. Maria

found no significant differences, implying that exposure to lead occurs on a scale larger than the housing unit. The question of the appropriate scale for lead remediation efforts is thus still open.

So, given the themes of impetus, epistemology, and scale, how does one design an environmental science curriculum? We decided to include a solid core of fundamental science courses, with electives in each of the geographic, physical, biologic and social environments. Students will choose one of six option areas: environmental information and mapping, watershed science, health and the environment, earth and atmospheric systems science, environmental analysis, and environmental engineering science.

In addition, there is room in the program for a student to take a second option area, a minor, or to engage in a self-directed (with advisor permission) option area. Interested individuals may review the new curriculum, by visiting the online version of the College Catalog, accessed at www.esf.edu.

We think the new program will provide a rigorous yet flexible introduction to environmental science, and should provide graduates

with the tools to function effectively in either the work place or graduate school. We look forward to greeting the first group of students in the program.

¹See David Billington, *The Tower and the Bridge*, Princeton University Press (1985) for a lucid discussion of disciplines and professions, science and technology.

²J. R. McNeill, Something New Under the Sun: An Environmental History of the Twentieth Century World, Norton (2000).

³ See David Edmonds and John Eidinow, Wittgenstein's Poker: The Story of a Ten-Minute Argument Between Two Great Philosophers, HarperCollins (2001) for a discussion of Popper's contributions.

⁴Maureen Christie, *The Ozone Layer*, Cambridge (2000).

Hassett, chair of the Faculty of Environmental Resources and Forest Engineering, is an environmental engineer whose research focuses on hydrologic modeling, and water quality management and modeling.

CAMPUS UPDATE

ESF Inventors Honored

SUNY Chancellor Robert L. King honored three ESF scientists among the university's top inventors and entrepreneurs in a May 20 ceremony in Albany.

The three were honored during a dinner that revolved around the theme of "Ideas-Innovation-Invention."

Dr. Israel Cabasso and Dr. Robert LaLonde were among 22 SUNY faculty members cited as outstanding inventors. They were honored because they received multiple patents, their inventions brought in considerable licensing income, or their inventions are seen as significant in other ways.

Cabasso is a

professor of chem-

istry and director of

the recently dedi-

cated Michael M.

Szwarc Polymer

Research Institute

at ESF. He holds

25 patents. For the

past 12 years, his

work has focused



Israel Cabasso



heavily on the development of applied electrochemistry, primarily for energy production and storage. Cabasso's research has covered a wide range of polymer membrane science and technology and he has made significant contribu-

tions to the development of reverse osmosis (for example, desalination of water), ion exchangers, kidney dialysis, gaseous and organic liquid separations, and fuel cells.

LaLonde is an expert in the chemistry of natural products. He has received three patents for discoveries concerning the transformations of various natural, small molecules into new molecular structure types that have potential for use in drugs to control cancer and fungal diseases.

Mianji Zhang, is a doctoral candidate in the Faculty of Chemistry. Zhang, who is doing research in LaLonde's laboratory, is a co-inventor with LaLonde. Zhang was among the inventors honored for receiving their first patents in 2001.

SUNY is ranked among the top 10 U.S. institutions for patents issued each year.

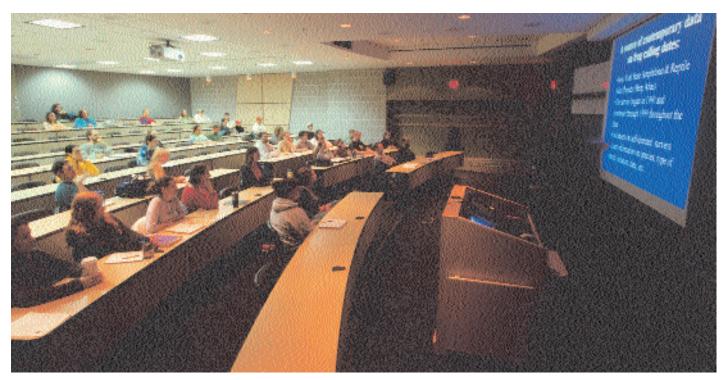


Mianji Zhang

Classrooms Featured in National Magazines

Two classrooms, completed in the fall of 2001 as part of the first phase of the Baker Laboratory rehabilitation, are profiled in two national trade publications for the innovative "smart classrooms" incorporated into the renovations.

The classrooms are profiled in the April editions of *Sound & Video Contractor* and *Systems Contractor News* because the lab renovations included a major investment in the latest multi-media technologies.



ESF's newest "wired" classroom in the partially renovated Baker Laboratory.

S&VC takes a detailed look at the equipment used, the configurations, and the benefits to students and professors. The article highlights the college's use of hightech facilities for lectures and distance learning. The article also notes local and regional contractors working on the renovation including QPK of Syracuse, Univisions of Syracuse, and Myers Group of Endicott. The article is available online at www. svconline.com.

Systems Contractor News also highlights technologies used to maximize the students' learning experience.

The completed phase of Baker Laboratory focused on the first-floor wing of the building, which now contains laboratory, lecture and office space for the college's Faculty of Construction Management and Wood Products Engineering. It also houses academic computing facilities and the college's analytical and technical services unit.

Phases II and III of the reconstruction will focus on renewing Baker's four-story tower, eventually creating a state-of-the-art center for engineering and technology.

Faculty Helps Restore Rippleton Schoolhouse

ESF's Faculty of Landscape Architecture played a role in the restoration of the historic Rippleton Schoolhouse, which was relocated to Lorenzo House in Cazenovia, N.Y., from the Niles Homestead, also in Cazenovia.

S. Scott Shannon, associate professor, developed the landscape restoration plan. Other members of the faculty conducted the cultural landscape analysis, based on groundbreaking standards they developed with the National Park Service for such studies.

This was the first cultural landscape report to be undertaken at any of New York's 35 designated sites by the Bureau of Historic Sites. The report identifies historic qualities of the Lorenzo landscape and provides a comprehensive document for planning any future site projects.

The schoolhouse was built circa 1812 on Rippleton Road. Along with its life as a schoolhouse, the building also served as a woodworker's shop, a private residence, and a chicken coop.

Students Win Society of Wood Science and Technology Poster Competition

Two ESF students took top honors in a student poster competition at the national Society of Wood Science and Technology annual meeting in June.

Iris Vazquez-Cooz won first place for her poster, "A Differential Staining Method to Identify Libriform Fibers and their Lignification in Normal and Tension Wood of Red and Sugar Maple." Vazquez-Cooz, an ESF doctoral candidate, worked with Dr. Robert W. Meyer, director of the Tropical Timber Information Center, on the material for the poster.

Patrick Rappold won second place for his poster, "An investigation of the Relationship between Harvest Season, Log Age, and Drying Schedule on the Coloration of Hard Maple Lumber." Rappold worked with Dr. William B. Smith, a professor in the Faculty of Construction Management and Wood Products Engineering.

Rappold received his master's degree from ESF in May.



Is the FUTURE in a

Funding, Fuel Cell Follow SUNY Energy Center Designation

by Claire B. Dunn

College of Environmental Science and Forestry was designated this year as the SUNY Sustainable and Renewable Energy Center, and promptly landed funding for the first fuel cell of its type in New York state.

The developments not only underscore the college's long history in innovative energy research, but also mark a wider recognition of ESF's promising future in the field of alternative energy sources.

"This new position for ESF recognizes the first-rate research being done right here in Central New York," said Dr. Cornelius B. Murphy, Jr., the college president. "Our scientists, particularly the chemists, structural biologists and forest products experts, are among the leaders in the field. And now that ESF is the official center for advancements in this important area, the college will be better able to obtain the support that is critical to continuing its efforts."

The energy center designation, bestowed by SUNY Chancellor Robert L. King, marks the college as the university-wide clearinghouse for new developments in biofuels and other innovative energy-producing techniques.

"With this designation SUNY's College of Environmental Science and Forestry will play a key role in helping New York State design a more sustainable future and, more broadly, help reduce the nation's dependency on foreign sources of energy," King said.

The college received funds to install a molten carbonate fuel cell that will be used to produce energy to help power the college's campus and to research methods for commercializing clean energy.

GGREEN

The New York Power Authority is providing more than \$2.5 million in "front-end funding" to get the project started. Also, the New York State Energy Research and Development Authority announced a \$1 million grant to the college for the fuel cell project. NYSERDA President William M. Flynn made the award to Murphy during the 2002 NYSERDA Combined Heat and Power Conference in New York City.

The 250-kilowatt molten carbonate fuel cell will be the only one of its type in New York state, and one of only about five across the country.

"This is a quasi-commercial prototype," Murphy said. "The molten carbonate cell operates at higher temperatures than traditional fuel cells. We'll be studying its reliability and feasibility for commercial use."

Murphy said the installation is the first stage of a larger project that will eventually match the fuel cell with a gasifier fueled by wood. The wood, a type of willow, has been the focus of more than 15 years of research by ESF scientists exploring ways to commercialize woody crops in the United States.

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"With this designation SUNY's College of Environmental Science and Forestry will play a key role in helping New York State design a more sustainable future and, more broadly, help reduce the nation's dependency on foreign sources of energy," King said.

"It will be an innovative process. It will combine two high-tech methods to make wood into clean energy. There's little waste and little environmental impact, and, of course, it's a renewable resource," Murphy said.

When the 85,000 pound fuel cell is installed on campus, it will occupy a space roughly 10-feet-by-33-feet. Initially, it will be powered by natural gas. Once it is matched with the gasifier, it will be fed with willow grown under the auspices of ESF's Salix Consortium.

The consortium, a partnership of more than 20 organizations that are exploring ways to commercialize willow biomass crops in the Northeast and Midwest, is a major part of ESF's energy efforts. ESF is the lead agency in the consortium, which has received support from the U.S. Departments of Energy and Agriculture, NYSERDA, Niagara Mohawk, Oak Ridge National Laboratory, and others.

Willow grown through the research project is scheduled for a test burn later this year at the NRG Inc. plant on the shore of Lake Erie. The burn will answer questions about how the co-firing of willow and coal affect the operation of a specially constructed unit built to turn the wood into clean energy.

"We know it works. It's really a very simple process," said Mike Boismenu, plant manager of the facility in Dunkirk, N.Y. "Now it's heading toward its final testing."

Willow hold promise for more than providing energy.

Scientists in ESF's laboratories and field stations are working with salix to produce bioplastics with myriad uses. Dr. James P. Nakas is researching their use in the manufacture of goods ranging from running shoes to disposable drink-cup lids. Those items pack a big advantage: When buried in a landfill, a bioplastic cup lid will break down in months, leaving behind only carbon dioxide and water. A traditional lid such as those currently distributed by fast-food stores will remain identifiable after years in a landfill.

In addition to the energy and plastics applications, the project packs a benefit for the nation's farmers, who, under the terms of the 2002 federal Farm Bill, qualify for cash payments if they grow energy crops.

Wood is replacing corn and other agricultural crops as the energy source of the future. "That's been one of the paradigm shifts in the past couple of years," said Dr. Arthur J. Stipanovic, an ESF polymer chemist. "Wood can be used for all these purposes and it doesn't compete with the food chain."

An acre of willow can produce eight tons of wood per year, which, when dried, will yield about five tons. Translated into energy, the wood can produce about 6,000 BTUs per ton, about the same as the coal that is mined in the western United States.

Murphy said the new developments help map the college's future in the high-tech areas of fuel cells and alternative energy sources.

"This award and our partnership with the New York Power Authority and NYSERDA play a key role in our vision for the kind of top-caliber scientific research being done by SUNY-ESF's chemists, structural biologists and forest products experts in the science of sustainable and renewable energy," Murphy said.

Dunn is assistant director in the Office of News and Publications



Help Bringing Ideas to Fruition Leads to Science Fair Prize

nowledge and skill are important, but the people part is important too."

This was some of the advice Dr. Thomas E. Amidon imparted to Joshua Kline, a Liverpool High School student, whom Amidon mentored this year.

Amidon served as Kline's mentor during the months-long process of developing a robotic tactile sensing device for a local science fair. The project ultimately took Kline to the Intel National Science and Engineering Fair competition in Louisville, Ky., in May where he won fourth place honors and \$500 in a category that had 145 entries.

Through a series of connections that led from Liverpool to ESF, Kline met Amidon, chair of the Faculty of Paper Science and Engineering, who was more than willing to help Kline with his project.

When a human picks up an object, he or she applies only the force necessary. Kline wanted to build a mechanical arm that acted in the same manner. Amidon helped him bring that idea to fruition. Kline's robotic arm could pick up objects ranging from a Styrofoam cup to a baby food jar using sufficient strength to accomplish the task, but not crush the object.

"I wanted to do something I didn't know a lot about," Kline said about choosing robotics as his subject. Overall the project took five months — two in the planning stages and three in construction.

The project started out as a course requirement for Kline's ninth grade honors earth science class at Liverpool High School. Because Kline was interested in engineering, he approached his technology teacher, Todd Dischinger, for help. Dischinger in turn put him in touch with ESF's Dr. Charles M. Spuches, associate dean and coordinator of the "ESF in the High School" program, which will be in Liverpool this fall. Although Kline isn't registered for the program he has benefited from the ESF/Liverpool relationship.

While all the LHS science teachers encourage participation in the Greater Syracuse Scholastic Science Fair, Kline's participation at the Intel fair was an added bonus. At 16 years old, he was the youngest person ever chosen from Central New York to move on to the international competition.

"I didn't expect to go that far," Kline said. "I went out to Kentucky and did as good as I could."

Kline expected his mentor to help with the nuts and bolts of his project. What he got in Amidon was an advisor, mentor, life coach and friend. To show his appreciation, Kline presented Amidon with souvenirs from the fair including a poster and program, which lists Amidon as his advisor.

The Intel fair had participants from 39 countries, and judges with engineering backgrounds reviewed the projects. Kline could have classified his project in a number of specific areas of engineering ranging from electrical, computer programming and biomechanical, but opted to keep it in the general engineering category to give the judges more leeway in their decision process. One thing the judges were looking for in the projects was real world applications.

Continued on next page



The giving back is the best part, according to Amidon.

"It's the most fun — passing on knowledge — that's the fun part."

Above, Joshua Kline and Dr. Thomas E. Amidon

Representatives from NASA saw just such potential for the robotic arm and presented Kline with an honorable mention award. Usually, NASA honors entitle the winner to a week at Space Camp, but because of his age, Kline couldn't attend.

Upon hearing of the NASA recognition, Amidon began tossing ideas back and forth with Kline on how to improve the device to make it better able to deal with unplanned situations that might be encountered in space.

As he had done all through the process, Amidon kept Kline's best interests at the forefront and began asking questions, "Would you enjoy it enough to do it again? Would you learn from another project? It takes a big time commitment."

Kline admitted it was something he needed to seriously consider because the project was such a large commitment.

Though he's not sure if there is another science fair in his future, Kline is still working on his project. He and his father, Rick Kline, had plenty of time to discuss it as they drove back from Kentucky. "We kept discussing how to make the robot better," Kline said. Talk of touch sensors and reshaping the device to look like a real hand were just some of the ideas.

"At this fair, if you take a couple of different projects and put some of the ideas together it would be great," Kline said.

"The progress of science works that way," Amidon said. "There are very few new ideas."

If Kline does enter the science fair next year, Amidon's influence will be seen in Kline's project. The professor stressed an emphasis on supporting data. "I want to keep the data component in the project, and not just have a demonstration," Kline said of future projects.

Amidon asked Kline what process was used for judging and Kline explained how the judges went in first and took notes to formulate their questions, and then the judges interviewed the young scientists.

That experience will serve Kline well later in life. "The process is like a master's or Ph.D. defense," said Amidon. "Faculty members get your thesis for a week and then you give your defense. Then they'll ask the really tough questions."

Rick Kline was impressed with the enthusiasm the youths had for their projects. It was refreshing, he said, to see so many kids involved in something positive because "it seems only the troublemakers get the media attention." Another thing that impressed Rick Kline was the amount of time Amidon spent with his son. "I saw Tom guide Josh to think like an engineer. He came out to the house for three hours to talk with Josh about the project and develop ideas. For someone to take that kind of time and then say, 'I wish I could stay longer' is fantastic."

"Youth are 20 percent of our population, but 100 percent of our future," Amidon said. Because of this, Amidon feels it's important to give something to the younger generation.

The Intel fair organizers feel the same way. Judges participating in a Q & A panel with students stressed one thing above everything else — the importance of giving something back when they become adults

The giving back is the best part, according to Amidon. "It's the most fun — passing on knowledge — that's the fun part."

"I had people who did that for me," said Amidon, including the late Dr. Renata Marton, an ESF faculty member who took Amidon under her wing during his doctoral studies. Amidon learned as much observing her work as helping her with the science. "She didn't need to do that," he said, but her generosity of spirit left its mark on Amidon and he, in turn, has helped others.

Amidon enjoyed the give-and-take between student and mentor. "Every time Josh came back with more questions, I knew he was just drinking it all in," he said.

"He definitely helped me grasp the concepts involved," Kline said. "The back and forth discussions helped sink it all in my head."

"I do think I helped keep the 'science' in the project," said Amidon.

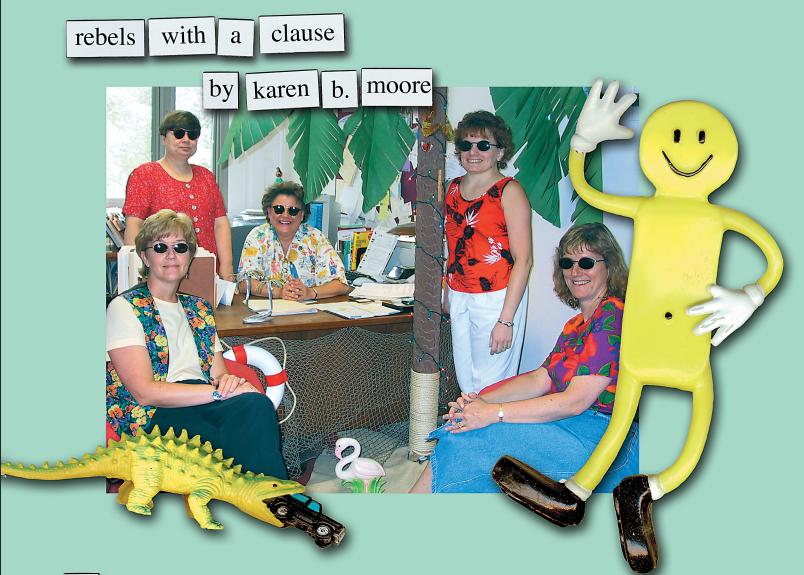
Perhaps it was the non-scientific information that has become more important to the high school student.

Amidon also gave Kline plenty of practical advice. "There's a lot to learn by living," Amidon advised. "Don't skip the prom. That's part of the learning experience too." Kline is already working on that balancing act. During the course of the school year he also played on the freshman basketball and JV lacrosse teams.

"The world is made up of people, and people need to be heard in order to learn," Amidon said. "People matter, connecting to them is important and you have to listen to do that. If you can listen and hear them, then they'll listen to you too."

"Tom set a great example for Josh in all aspects from science to service. You can never put a price tag on that," Rick Kline said.

Moore is public relations associate in the Office of News and Publications



it's ironic that the people behind the effort to raise SUNY-ESF's visibility remain relatively invisible themselves. Even when they were honored for their efforts they weren't seen at the awards ceremony.

From what they tell us, it was a very nice awards program.

The college's 2001-2002 Central New York Visibility Initiative, developed and executed by the Office of News and Publications, won the award for "Best of Category in Community Relations" at the annual SUNY/CUAD (State University of New York Council for University Affairs and Development) 2002 conference. The campaign, designed to raise the college's profile in Central New York, featured a mix of news coverage, advertising and special events to bring ESF to the people and the people to ESF.

The SUNY/CUAD awards committee called ESF's entry "a stand-out, because of its excellent results generated by creative use of limited resources and the variety of outstanding communications tactics used."

Over the years, it has been said that ESF is better known in the Philippines than in the college's hometown of Syracuse, and how many times have we heard the college misidentified in the media as "The College of Forestry at Syracuse University?"

When Dr. Cornelius B. Murphy, Jr., took over as ESF's president in May 2000, he set about to change this. He wanted ESF to become known and respected in its own neighborhood. He wanted the college's name to be as familiar as Nike, Tiger Woods and apple pie.

There were some primary themes Murphy wanted to bring to the public's attention. Like Dr. Seuss' Horton who heard the Who, he wanted people to know "We're here! We're here!" and also that ESF is an entity wholly distinct from our neighbor on "The Hill," Syracuse University. It was also important to promote the quality of ESF's programs and its worldwide reputation for excellence. Finally, the college's long tradition of academics, research, and service programs and its role in defining core environmental studies since 1911 had to be brought to the forefront.

And did we mention the modest budget that went along with this assignment?

Enter the Office of News and Publications.

If any group of people is capable of thinking outside the proverbial box and stretching a dollar until George Washington screams in pain, it's the six-member staff of News and Pubs. The group — consisting of Jeri Lynn Smith, director; Claire B. Dunn, reporter and editor; Wendy P. Osborne, art director and designer; Karen B. Moore,

Continued on next page

who writes, designs and works on special events; Cindi Gamage, keyboard specialist 2, and Kathi Ciereck, administrative aide — developed a multitude of new, exciting and fun ways to get ESF's name

If you ever visit the ESF campus, you'll know the News and Pubs office when you get there. It's the only office on campus that boasts a mini-beach (complete with palm tree and an arm-eating crocodile), wind-up toys that spit fire, a wall of Magnetic Poetry and a collection of Happy Meal toys. These are essential tools for stimulating the creative process necessary to devise a visibility initiative, write articles, design publications

and have fun while doing it. On more than one occasion, the staff has threatened to print its own

T-shirts reading, "News & Publications — Rebels with a Clause."

out in the public.

But back to that missed award. When the staff sent its entry into SUNY/CUAD in March, they anxiously awaited news that they had won. And waited. And waited. And waited some more.

A day before the awards were to be presented and with no notification in hand, the group finally admitted that through some cruel twist of fate, some cosmic gaff, they hadn't made the cut. That is until two almost simultaneous phone calls rang in to the office. One was from a SUNY/CUAD officer wanting to know who would be on hand the next day to accept the office's award. The second call was from Michael Dugan, senior staff assistant from ESF's Office of Development, who was attending the conference and asked if he should accept the award on the office's behalf.

After shouts of exuberance — if not vindication — the words "Road Trip!" emanated from 122 Bray Hall. Smith, Dunn, Osborne and Moore immediately made plans to meet at 7 a.m. and drive to Rochester to personally accept the award and bask in the glow of a job well done.

And if it hadn't been for a pounding rainstorm slowing traffic and one missed turn, that's exactly what would have happened. Instead, like a scene from a B movie, the group entered the hotel, got directions from the front desk clerk, dashed up the escalator and entered the ballroom only to see Dugan sitting at the breakfast table with the award already in hand.

They had missed their moment by mere, well, moments.

"It makes a better story than if we had actually gotten there in time," said Smith.

Despite the group's poor sense of timing on this occasion, the man who put the ball in motion was pleased with the results. "I am thrilled with the award. It reinforces the efforts being applied by our News and Publications staff to enhance the visibility of the college," said Murphy.

The office has won accolades before. Last year at SUNY/CUAD the college's St. Patrick's Parade participation won a Judges' Citation in the Community Relations category. The ad "Before there was Earth Day there was ... ESF" (see the award-winning ad on page 15) won a Gold Award from the Council for Advancement and Support of Education (CASE) District II. ESF competed against colleges from Delaware, the District of Columbia, New Jersey, Ontario, Pennsylvania, Puerto Rico, New York, the U.S. Virgin Island and West Virginia for the print advertising award.

You would think that winning these awards in close succession would go to their heads, but it hasn't. "We only insist on being called 'The Award-Winning Office of News and Publications' on the first reference. After that, News and Pubs will suffice," joked Smith.

Even though only four people went to the awards presentation, the honor was a team effort. Impromptu brainstorming sessions have broken out among the office members which have yielded ideas such as finding a way to print a 12-page tabloid about ESF in the Syracuse Newspapers at no cost to the college (it worked) and arranging for a bagpiper to play at Murphy's inauguration (it didn't).

The visibility campaign was a yearlong endeavor that included: heavy representation both editorial and through ad space; exhibits at the WTVH-5 \$5 Million Ultimate Fishing Challenge and the New York State Fair; a "SUNY-ESF Turns 90" 12-page newspaper tabloid; an entry in the 2002 Syracuse St. Patrick's Parade; and an Earth Day message printed on paper grocery bags distributed through Peter's Groceries in the Syracuse area.

There is also a new and improved ESF News web site (www.esf.edu/newspubs/) that includes current news releases, a real-time events calendar, and full-text files of a number of the college's publications.

Measuring the success of a visibility campaign can be difficult. Do you go by the increase in ESF's student body? Or do you work on the anecdotal evidence reported by colleagues?

After ESF made a splash in "Empire Education" in the Eagle Newspapers, publisher Stewart Hancock saw Murphy at a meeting and remarked, "All of a sudden, you guys are everywhere, even on the cover of my own newspaper!"

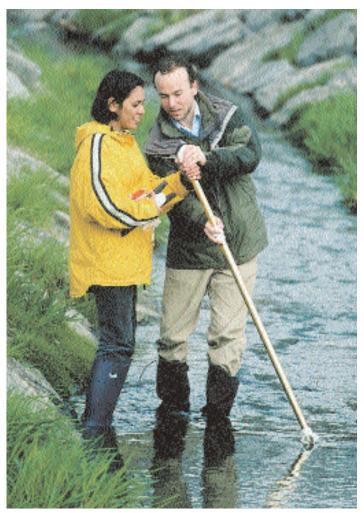
Then there was the comment reported by Linda Tarolli, secretary to Vice President Connie Webb, after publication of "ESF Turns 90" Tarolli was told by her neighbor, "Oh, so that's where you work! I thought you worked at some florist."

Because the news (and publications) never stop, the office can't rest on its laurels. The brainstorming has commenced for the 2002-2003 visibility plan. So if you walk by 122 Bray Hall and you hear raucous laughter, see people playing with toys and writing poetry with magnetic words, know that they are working very hard.

Vying with other News and Pubs writers, Moore, ESF public relations associate, drew the short straw for this assignment.

SS II. AFFILITE

by Claire B. Dunn



Ted Endreny shows engineering graduate student Juliaty Sopacua of Indonesia how to "do something."

When you talk to Ted Endreny, you quickly learn that he wants to do something.

"I have the utmost respect for people who do things: make an infrastructure improvement, design a restored stream, that kind of thing," he said. "But we're seeing the death of a certain culture of people who have the know-how to go out and do something to solve a practical problem."

Endreny intends to be one of the people doing things.

After three years at ESF, serving both the Faculty of Forest and Natural Resources Management and the Faculty of Environmental Resources and Forest Engineering, Endreny is busily engaged in the role of young faculty member. He participates in four campus committees, advises or co-advises 12 students, and teaches — courses including hydrology, meteorology and watershed modeling. He also

supervises one research associate and serves as the faculty adviser for Habitat for Humanity. The activity level, he said, is typical of newer ESF faculty members finding their professional niches.

Endreny's niche will involve water resources and it will relate to his engineering abilities. It will be useful to his students, beneficial to the larger community and personally satisfying. It will allow him to solve real problems and prevent him from getting entirely wrapped up in theoretical thinking. And it will permit him to sprint home by 5 p.m. most days to join his wife, Anna Henderson Endreny, in keeping tabs on their 4-year-old daughter, Sierra, and 1-year-old son, Noah.

Graduate student Tim Riley has worked with Endreny for the past year.

"He works hard to maintain a positive working relationship with his students," Riley said. "He's very intelligent. He thinks very critically and seems to ask the right questions."

And he rarely stops moving, according to Riley and the other grad students who share space next door to Endreny.

"He's very intense," Riley said. "He's very — let's see, what's the appropriate word..."

"...intense?" suggested Ruthanna Hawkins, who was working nearby.

Said Riley, "Let's put it this way. He has two speeds: stop and go fast. He's easy to work with and he always has his students' best interests in mind. And he's always here, so if you need something, you can just go in and ask. He's busy. He'll give you all the time you want or need. But he's busy."

Riley worked himself into upgrading the description. "His speeds are stop and go really fast."

Hawkins wasn't sure. "I haven't seen that stop speed," she said. Riley assured her that he'd visited Endreny at home briefly and witnessed the "stop" mode.

Hawkins turned back to her computer, saying, "Wow, I'm impressed."

At the age of 34, Endreny has an undergraduate degree from Cornell, two master's degrees (one from North Carolina State and one from Princeton), a doctorate from Princeton, Peace Corps experience, and work experience with the Environmental Law Institute. He is a certified hydrologist and a professional engineer. He has taught seven courses during his three years at ESF. This summer he is committed to writing seven encyclopedia articles, creating instructional lectures in PowerPoint for 19 chapters of a teaching manual, and revising at least four technical papers.

Maybe that's why some of his undergraduate students have called him "Dr. Adrenaline." Continued on next page

"He has a lot of energy," said Caroline Romano, a senior forest engineering major who took Endreny's hydrology and hydraulic engineering course this past spring. "You can't not pay attention for a second because you'll miss something. He covers a lot."

"The 'Dr. Adrenaline' thing probably came about because I've been running in so many directions trying to figure out what's going to be my long-term career," Endreny said. "The students might see me as kind of frenetic," he said. "I look forward to developing a more central career description that brings me into focus."

It's difficult to narrow his professional choices, he said, because of the many intriguing projects under way at ESF.

"I'm in a candy store. There are so many projects. I look around and say, "The stuff that Don Leopold's doing (in ecosystem restoration), that's so neat! The stuff that Russ Briggs is doing (in runoff control structures), that's so neat! If you really want to know what's going on in my head, well, it's quixotic notions of partnering in research with the entire suite of ESF faculty."

Three of his current projects focus on different aspects of water resources:

- A study of how development patterns affect water quality and flow patterns from the Croton watershed to New York City, with James Hassett, chair of the Faculty of Environmental Resources and Forest Engineering.
- A feasibility study with Leopold on restoring Onondaga Creek to a more natural system from its current urban, channelized system.
- Developing a way to predict water quality change in Spafford Brook, where Briggs is studying the effect of recent plantings on controlling water quality along farmland.

Endreny's interest in water resources has its roots in his child-hood, when his grandfather took him fishing for shad in the west branch of the Delaware River. As an undergrad at Cornell in the late 1980s, he said, he and his buddies enjoyed "risking life and limb" fishing for trout in the chilly waters of Cayuga Lake.

During his years in the Peace Corps, he was assigned to help protect a "cloud forest" 1,200 meters up the side of a mountain in Honduras. The best way to get local support, he learned, was to show people in a village lower on the mountain that the source of their drinking, cooking and washing water was the mountainous forest and its watershed.

It was during a post-Peace Corps respite at the Rongovian Embassy bar in Trumansburg, N.Y., that he realized his future was in water. He describes it now as an approach that was at once both selfish and selfless.

"Working with water was satisfying because its life-giving role motivated a village to protect much of the land in their watershed," he said. "But the peace of mind in being associated with a good conservation program doesn't pay the bills. Working with water is also job security. Maintaining and restoring its quality and quantity will grow to be an effort larger than that directed toward oil exploration and processing."

"I was trying to be somewhat practical," he added. "I didn't want to study moss on Venus. I didn't have my head in the clouds completely."

When he talks — be it about his work, his students or the challenges inherent in raising children — he exudes enthusiasm and energy about the subject at hand. And he lightens it up with a dose of quick humor. Even on his Web site (www.esf.edu/erfeg/endreny/), which presents an exhaustive description of his background, his classes, and different learning styles, he manages to poke fun at his career choice.

Endreny — the guy with a Ph.D. from Princeton, of all places — posted on the site this quote from Freeman Dyson, a professor emeritus at Princeton's Institute for Advanced Studies: "The Ph.D. is generally a tremendous waste of time. I'd like to abolish it. It's using up the best years of their lives, so they are middle aged before they can do anything." Dyson is himself the holder of a Ph.D. from Cambridge University, the author of "The Sun, the Genome, and the Internet," and the recipient of dozens of honorary doctorates. The statement was attributed to him in the May 2000 issue of *Physics Today*.

"I thought it rang true," Endreny said. "There are a lot of hoops out there one must jump through — you know, the bureaucratic, administrative components — that don't necessarily have a lot to do with what you really want to do."

"Plus it's always nice to have some self-deprecating humor there. It helps your credibility with the students."

Romano said Endreny's class often began with the theory behind what he was teaching, but moved quickly to useful, practical information. For their final projects, the students each had to analyze a section of Onondaga Creek, calculating the flow rate and designing a drainage basin and easements.

"The information he gave us was very practical and useful," Romano said. "A couple kids in the class were saying we'd never look at a rainstorm the same way again. We figured we'd all be trying to figure out the intensity of the rainfall."

Endreny said Romano's appreciation for fieldwork is typical of ESF students. "For the most part, they want to be out in the field. They want to work with their hands."

The Dyson quote sheds some light on Endreny's vision for the future of ESF. He sees the college as *the* institution best suited to merging the skills of highly trained technicians with the theoretical knowledge of highly educated academicians.

"Why did I spend all this time on my Ph.D.? Sure I can go present papers with my peers," he said. "But when it comes to communicating with my students and the community, I need the practical field experience that is going to help me do something to solve a problem."

"We don't want to be out there saying simply, 'In theory this is how it should be done,'" Endreny said. "We want to say, 'Let's take a walk into the field and see what might really work.'"

Dunn is assistant director in the Office of News and Publications



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ON CAMPUS

Awards and Honors

Dawson, Chad P., appointed managing editor, International Journal of Wilderness, June 2002.

Endreny, Theodore A., certified professional hydrologist, American Institute of Hydrology, Spring 2002.

Murphy, Jr., Cornelius B., appointed to the board of trustees for the St. Lawrence Aquarium and Ecological Center, Inc. May 2002.

CAMPUS CALENDAR

August 23-25

Cranberry Lake Weekend, Cranberry Lake Biological Station. A learning weekend for alumni and others. Additional information: H. Shaw, Office of Continuing Education and Public Service, 315-470-6891.

August 24-25

Registration for New Students, Syracuse Campus. First day of classes: August 26.

September 8-13

2002 Progress in Paper Physics Seminar, Skaneateles, N.Y. Additional information: D.S. Keller, conference chair, 315-470-6907 or www.esf.edu/pse/events/index.htm.

September 12

ESF Golf Tournament, Pompey Club, Pompey, N.Y. Lunch, 11:15 a.m.; play, 12:30 p.m. Additional information: J. Culkowski, 315-470-6632 or J. View, 315-470-6670.

September 25-28

Council of Educators in Landscape Architecture (CELA) Annual Meeting, Syracuse Campus, SUNY-ESF. Additional information: Faculty of Landscape Architecture, 315-470-6541 or http://cela2002.esf.edu.

October 4-5

Homecoming/Football Weekend, Syracuse Campus. Additional information: J. Culkowski or D. Caviness, Office of Alumni Relations, 315-470-6632.

October 6

Alumni Reception, Society of American Foresters Annual Meeting, Adams Mark Hotel, Winston-Salem, N.C. Additional information: J. Culkowski or D. Caviness, Office of Alumni Relations, 315-470-6632.

October 10-11, 2002

18th Annual NYS GIS Conference, Syracuse, N.Y. Additional information: Office of Continuing Education and Public Service, 315-470-6891 or www.esf.edu/ce.

October 11-12, 2002

Dard Hunter Revisited: A Symposium on Handmade Paper & Craft Design, Marshall Hall Auditorium, SUNY-ESF. Event sponsored by the Arts & Crafts Society of Central New York; hosted by Friends of Moon Library, SUNY-ESF. Additional information: www.newyorkbooks.org/dard_hunter_symposium.

October 18

Alumni Reception, American Society of Landscape Architects Annual Meeting, Parkside Hall, San Jose, Calif. Additional information: J. Culkowski or D. Caviness, Office of Alumni Relations, 315-470-6632.