ESF Making an IMPACT

SUNY College of Environmental Science and Forestry Annual Report 2007
Dear Friends,

One of the hopes of a college president is that what we do here will improve the world for current and future generations. We hope our students, our faculty and staff have a positive impact on the world around them. With its strong reputation for education, research, and service the SUNY College of Environmental Science and Forestry is making such an impact.

Our scientists are undertaking numerous green research projects — from alternative fuels to biodegradable plastics — that will help conserve the earth's resources. The addition of a bioprocess engineering major is reflected in our newly renamed Department of Paper and Bioprocess Engineering. The engineers graduating from this program will be well-educated to work in the bioprocess, bioenergy and biomedical industries, several areas that will continue to grow in importance as we try to lessen our dependency on fossil fuels and improve the quality of life.

ESF joined colleges nationwide in taking a leadership role to address global warming and create a sustainable world by signing the American College & University Presidents Climate Commitment. ESF has promised to develop long-range plans to reduce and ultimately neutralize greenhouse gas emissions on campus. The College has implemented a number of practices that put it on target for carbon neutrality by June 2015.

For the sixth year, ESF students continue to have an impact on the Syracuse community via our Community Service and Service Learning Initiatives by contributing more than 65,000 hours of service to the community.

And our alumni are having an impact on the world as well. Colonel Richard P. Wagenaar, FNRM '82, has been helping rebuild New Orleans post-Katrina as the leader of the New Orleans District of the Army Corps of Engineers. Steve Anlian, LA '75/76, has been instrumental in rebuilding Armenia following a devastating earthquake in 1998. And Dr. Ron Eby, a chemistry graduate, was awarded a National Medal of Technology by President Bush on July 27 for his work in developing Prevnar, a carbohydrate-based vaccine reported to be one of the "most important advances in pediatric medicine." These are just three examples of what our alumni are doing and the mark they are leaving.

Please join me in recognizing and celebrating ESF's achievements and the impact they have.

Sincerely,

Cornelius B. Murphy, Jr., President
SUNY College of Environmental Science and Forestry
Rankings and Ratings

ESF Among America’s Best Colleges

ESF has, for the seventh year in a row, earned a place among the top universities in America, as ranked by U.S. News & World Report.

ESF is ranked 38th in the list of the top 50 public national universities, and 85th in the list of best national universities, which includes both public and private institutions.

In the “Great Schools, Great Prices” category for national universities, ESF is ranked 33rd and is the only SUNY institution listed in this category. Last year the College was ranked 43rd. The formula used balances a school’s academic quality with the cost of attendance to achieve a “value” rating.

ESF also was ranked highly in the category of colleges and universities with the highest proportion of classes with fewer than 20 students. The College was tied for third place in the nation, at 76 percent.

College Gets Best Buy Designation from Barron’s

ESF is listed in the ninth edition of Barron’s Best Buys in College Education. ESF is one of 247 colleges and universities listed, and one of only five SUNY institutions in the book.

“For students who not only love the environment but are committed to learning how to preserve it through highly specialized and challenging curricula with plenty of hands-on experience, the answer may be SUNY-ESF,” the book states.

Barron’s surveys current students and asks them about the quality of each college and not just the cost. As a part of the State University system, ESF is affordable, but also strong academically, and that is what provides the real value to students and their families.
Rankings and Ratings

ESF Earns Strong Faculty Scholarly Productivity Index Ranking

ESF has been ranked among the nation’s top colleges and universities for scholarly work.

The ranking system, called the Faculty Scholarly Productivity Index, lists ESF fifth among colleges and universities in the category of “Specialized Research Universities — Applied Sciences.” ESF is also ranked eighth in the subcategory of “Fisheries Science and Management.”

The scholarly productivity index is produced by Academic Analytics, a for-profit company.

The index rates faculty members’ scholarly output at nearly 7,300 doctoral programs around the country. It examines the number of books and journal articles published by each program’s faculty, as well as journal citations, awards, honors, and grants received.

LA Achieves National Ranking

ESF’s Department of Landscape Architecture has, for the second year in a row, been ranked among the nation’s top programs in that discipline.

In rankings compiled by DesignIntelligence magazine, the undergraduate program at ESF was ranked 12th in the United States. The graduate program was ranked ninth.

When the survey results were broken down by region, the ESF undergraduate program did even better, with employers ranking the College second in the East, in a tie with Cornell University.

The study ranks programs accredited by the Landscape Architecture Review Board, based on a survey of leading landscape architecture firms and public practitioners.
Rankings and Ratings

Kaplan Calls ESF “Cutting-edge”

ESF is listed among 25 “Cutting-Edge Schools” in the 2008 edition of “You Are Here,” a college guide produced by Kaplan Publishing.

The cutting-edge schools are tied to what the book describes as “50 of today’s hottest careers.” Those careers include several ESF specialties: chemistry, environmental engineering, environmental science and hydrology, and landscape architecture.

According to Kaplan, “The typical ESF student is — no surprise here — outdoorsy and committed to environmental responsibility.”

“ESF students forego football in favor of their nationally ranked Woodmen’s Team — we said it’s outdoorsy — and soccer, golf and hockey clubs.”

Kaplan produces more than 150 titles annually on topics such as test preparation, college and graduate school admissions, and finance and investing.
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In The Classroom
In the Classroom

Undergraduate Enrollment Remains Strong

The College enrolled 242 freshmen and 206 transfer students for the fall 2006 semester, and the combined total of 448 new undergraduates was the largest number since 1983. More than 50 additional new students entered ESF in the spring 2007 semester. The College received almost 1,600 applications for undergraduate admission. Full-time undergraduate enrollment remained steady at approximately 1,350 students.

Thirty-four new students were enrolled in associate degree programs at The Ranger School in 2006, a smaller number than in recent years, and a more aggressive marketing plan for the Wanakena campus was put in place.

Preliminary enrollment figures for fall 2007 suggest that the College will enroll approximately 450 new undergraduates again this year, with Ranger School enrollment increasing to 44 students.

Graduate Enrollment Increases

At the graduate level, 111 new students enrolled in fall 2006, bringing the College's total (full-time and part-time) graduate enrollment to 587. Twenty-four additional graduate students entered the College in spring 2007.

The College enrolled 118 new graduate students in fall 2007. With the addition of 16 new faculty during the previous 18 months, the College is enthusiastically preparing for a period of restructure, revitalization and regrowth in its graduate programs.
In the Classroom

Five New Department Chairs Named

**Dr. Susan Anagnost** was named chair of the Department of Construction Management and Wood Products Engineering (CMWPE) effective beginning of the fall 2007 semester. She took over from Dr. Robert Meyer who resumed full-time teaching, research, and outreach duties in CMWPE.

Anagnost completed her undergraduate work in biology at Gettysburg College in Pennsylvania. She received her master's and Ph.D. in environmental and resource engineering from ESF.

Anagnost has been a faculty member in CMWPE for 15 years. She is also associate director of ESF's N. C. Brown Center for Ultrastructure Studies.

**Dr. Gary Scott** began as chair of the Department of Paper and Bioprocess Engineering in March 2007. Prior to the appointment Scott was associate chair and professor in the department.

Scott completed his undergraduate work in paper and bioprocess engineering at the University of Wisconsin-Stevens Point and his graduate work in computer science and chemical engineering at the University of Wisconsin-Madison. He came to ESF in 1998 following five years as a research chemical engineer at the USDA Forest Products Laboratory in Madison, Wis.

**Dr. David Newman** joined the ESF community in July 2007 as chair of the Department of Forest and Natural Resources Management. Newman was associate dean and professor of forest economics at the Warnell School of Forestry and Natural Resources at the University of Georgia. He completed his undergraduate work in forest management at the University of California-Berkeley and his graduate work in forest and resource economics at Duke University. In addition to his position at the University of Georgia, Newman has held visiting faculty/research positions in Sweden, China, and Australia.
In the Classroom

Dr. Arthur Stipanovic began his tenure as chair of the Department of Chemistry in September 2007. Stipanovic will also continue in his post as director of Analytical and Technical Services at ESF.

He completed his undergraduate and graduate work in chemistry at ESF. For nearly 20 years he worked in the private sector as a research chemist and research manager, first for St. Regis Paper Company and then for Texaco, before returning to ESF to teach in 1998.

Dr. David Sonnenfeld was named chair of the Department of Environmental Studies. Sonnenfeld was professor in the Department of Community and Rural Sociology at Washington State University and is a research associate with the Environmental Policy Group at Wageningen University in The Netherlands.

He holds a BA from the Honors College at the University of Oregon and MA and Ph.D. degrees in sociology from the University of California, Santa Cruz. He has also held positions at Chulalongkorn University in Thailand and at the Australian National University in Canberra.
In the Classroom

ESF Adds New Faculty Members to its Academic Community.

In the Department of Environmental and Forest Biology, Martin Schlaepfer, Melissa Fierke, Martin Dovciak, Jesse Brunner and Christopher Whipps were named assistant professors.

In the Department of Forest and Natural Resources Management, David Newman was appointed department chair, and John Stella was named assistant professor. In the Department of Chemistry, Neil Abrams was named assistant professor. The Department of Environmental Resources and Forest Engineering named Wendong Tao, Stewart Diemont, and Jungho Im assistant professors.

The Department of Paper and Bioprocess Engineering named Biljana Bujanovic and Klaus Doelle assistant professors. The Department of Landscape Architecture named Margaret Bryant and Jeffery Blankenship assistant professors.

These new faculty will contribute greatly to ESF teaching, research and service activities during the 2007-08 academic year and beyond.

ESF Receives Empire Innovation Grant From SUNY

ESF is expanding its faculty through SUNY’s Empire Innovation Grant program. The program provides funding for colleges to bring on new faculty to enhance the institution’s research capacity and in turn contribute to the economic development of New York state. The program is designed to bring in senior researchers who have the potential to make a major impact on research in the state.

Since 2006, ESF has received funding for five new faculty members in the areas of biorefinery research, global climate change, and renewable energy.

The College also received funding under a second SUNY initiative, the High Needs Program, which allows institutions to add new faculty in high needs areas in New York. Under this program, the College received funding for two new faculty members: one in bioprocess engineering and one in ecological engineering.
In the Classroom

Paper Science Program Gets New Name

ESF changed the name of its Department of Paper Science and Engineering to the Department of Paper and Bioprocess Engineering to reflect the addition of a new bioprocess engineering major.

The first and only program of its kind in the northeastern United States, the bioprocess engineering program seeks to train engineers who will work in the emerging bioprocessing, biofuels, and biomedical industries to produce energy and related chemical products from renewable resources.

Students in this program master a variety of subjects that are normally found in a chemical engineering programs, and supplement those studies with advanced courses specific to bioprocess engineering. The program focuses on the use of wood and other renewable biomass materials to replace petroleum in energy and industrial product applications.

ESF has the distinction of housing the country's oldest continuously operating degree-granting program in paper science and engineering.
Students and Faculty Receive Chancellor’s Awards

Two seniors received the Chancellor’s Award for Student Excellence during an April 2007 ceremony in Albany.

Steven Fox of Grand Rapids, Mich., and Breeanne Neal of Sherman, N.Y. were presented with their awards during a ceremony at the Empire State Convention Center, where they received framed certificates and medallions, which were worn at commencement.

Chancellor’s Awards honorees excel both in academic achievement and in at least one of the following areas: leadership, athletics, community service, creative and performing arts or career achievement.

Fox majored in natural history and interpretation. He was president of the Undergraduate Student Association, an orientation leader, peer tutor coordinator, admissions volunteer, and vice president of the honor society Alpha Xi Sigma.

Neal majored in environmental biology. She was an orientation leader, head student-to-student mentor, and vice president for Alpha Xi Sigma; played intramural sports at Syracuse University; and graduated a semester early.
In the Classroom

Dr. Donald J. Leopold

The Chancellor’s Award for Excellence in Faculty Service was presented to Dr. Donald J. Leopold for consistently superior service contributions as a member of the teaching faculty. The award recognizes faculty members whose service exceeds the work generally considered to be part of their basic professional obligation.

Leopold is chair of the Department of Environmental and Forest Biology. He has served the ESF community as a distinguished professor and researcher for 20 years. He specializes in dendrology, freshwater wetland ecosystems, and Adirondack ecosystems.

Leah Flynn

The Chancellor’s Award for Excellence in Professional Service was bestowed upon Leah Flynn, director of student activities. Flynn has served the ESF community since 2002.

The award recognizes consistently superior professional achievement within and beyond the position. Recipients are individuals who have repeatedly sought improvement of themselves, their campuses and ultimately the State University and, in doing so, have transcended the normal definitions of excellence.
In the Community

College Community Supports SEFA/United Way Campaign

The 2006 State Employees Federated Appeal (SEFA) at ESF culminated with the ‘Delivering of the Green’ to United Way headquarters in Syracuse on Nov. 21, 2006.

ESF President Neil Murphy and SEFA/United Way Chair Mark Hill delivered a money tree sprouting ‘Murphy Bucks’ created just for the occasion. The delivery was made in one of the College’s electric-powered vehicles.

More than $57,000 was donated or pledged by ESF staff and faculty.

ESF Participates in Partnership for Better Education

ESF joined with four other colleges to participate in the Partnership for Better Education to improve the quality of education in the Syracuse City School District.

Participating colleges adopted high schools to provide mentor-like relationships with the students. ESF partnered with Fowler High School and hosted a number of events on campus including a science fair and job shadowing for students interested in engineering, science and biology. Members of the ESF community also helped foster student interest in science, technology, engineering and math.

Also participating in the program were Onondaga Community College, SUNY Upstate Medical University, LeMoyne College and Syracuse University.
Alumni of Distinction Awards Presented

The ESF Alumni Association honored a trio of deserving alumni during December 2006 convocation exercises.

Curtis H. Bauer was presented with the association’s Lifetime Achievement award. Bauer graduated from ESF in 1950 with a degree in forestry. He founded a consulting forestry business and built it into the largest in New York state. By the time he sold the Jamestown-based business in 1991, Forecon, Inc., counted among its clients some of the largest industrial forest products firms in the country.

Mr. Bauer served on the ESF’s College Board of Trustees holding the positions of chairman and vice chairman. He served longer than any board member in the entire SUNY system. Mr. Bauer also served on the Alumni Board for 30 years, and on the ESF College Foundation, and chaired an advisory committee to the Department of Forest and Natural Resources Management.

Mr. Bauer passed away Aug. 29, 2007.

Receiving Alumni of Distinction awards were Colonel Richard P. Wagenaar and Steven Anlian. Waganaar, a 1982 Forest and Natural Resources Management graduate, is the leader of the New Orleans District of the Army Corps of Engineers. He assumed the post six weeks before Hurricane Katrina hit southeastern Louisiana. Since the hurricane, the focus of his job is on repairing the levies and installing a hurricane protection system.

Wagenaar uses his ESF background to bring an environmental scientist’s point of view to the job thereby looking not only at the safety concerns but how to protect the marshes and ensure there is plentiful fresh water.

Anlian, a 1975 landscape architecture graduate, has dedicated himself to helping rebuild Armenia following a devastating earthquake in 1998. He took a leave of absence from his position at HOH Associates to volunteer with Armenia’s national planning agency, providing technical assistance during recovery efforts after the earthquake. He has returned to the country repeatedly to assist with its rebuilding. Anlian developed the “New Strategy for Armenia’s Earthquake Zone,” which presented innovative solutions to providing permanent shelter for the displaced families in the earthquake region. In July 2006, he returned to Washington, D.C., as the director of infrastructure in the Department of Operations for the Millennium Challenge Corporation, which will assist with future natural disasters.
In the Community

Community Service Earns ESF Honors

ESF was recognized for its exemplary student community service and service-learning programs by being named to the President’s Higher Education Community Service Honor Roll for 2005-06.

The Honor Roll is a program of the Corporation for National and Community Service, and is sponsored by the President’s Council on Service and Civic Participation, the USA Freedom Corps, and the U.S. Departments of Education, and Housing and Urban Development.

For the sixth year, ESF's Service Learning Initiative has been improving the student experience and contributing to local communities. The College continues to expand the scope of its service learning initiative with increased community involvement.

Faculty use service learning to give students hands-on experience and community service helps students clarify their career goals by affirming their chosen path or introducing them to new possibilities.

Students contributed more than 65,000 hours through the service learning initiative and community service in 2006-2007.

The College increased both the number of service learning courses offered and the number of community service projects completed in 2006-07. Nineteen new community partners joined ESF in its effort to bring the College and community together.
Center for Native Peoples and the Environment Established

ESF established a Center for Native Peoples and the Environment that will focus on developing connections between traditional ecological knowledge (TEK) and western scientific approaches.

Establishment of the center, the only one of its kind in the Northeast, was announced in October, 2006, during ESF’s daylong teach-in on indigenous and western approaches to environmental stewardship.

The center’s goal is to create programs that draw on the wisdom of both indigenous and scientific knowledge to address environmental protection and restoration. Center programs will include efforts in education, research and public outreach.

Dr. Robin W. Kimmerer was named center director. Kimmerer is a botanist of Native American heritage who is an enrolled member of the Citizen Potawatomi Nation. She is a professor in ESF’s Department of Environmental and Forest Biology.

The center is guided by an advisory board consisting of ESF environmental scientists, environmental leaders from Haudenosaunee communities and indigenous educators from around the country.
In the Community

ESF Helps Centro Introduce Hybrid Buses

ESF helped Centro unveil its fleet of nine diesel-electric hybrid buses in Central New York, furthering the transportation company’s commitment to operate clean-air buses for public transportation.

ESF faculty, staff and students rode the new buses from campus to a news conference in downtown Syracuse, breaking through a banner bearing the ESF and Centro logos.

The City of Syracuse and Onondaga County declared the day, March 22, 2006, to be Centro and SUNY-ESF Green Day to Promote Energy Efficiency and Environmental Stewardship Day.

President Murphy said he was pleased that ESF could be part of Centro’s significant transition to even cleaner and quieter technology, making public transportation in Central New York even better.

Hybrid diesel-electric buses are 33 percent more fuel efficient than current technology.
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Groundbreaking Research
Groundbreaking Research

Producing Cellulose Nanocrystals from Biomass

Researchers at ESF are developing ways to use cellulose from wood to strengthen plastics, providing a lightweight component that has the added advantage of being biodegradable.

The key is pulling nanocrystals of cellulose out of natural materials, ranging from trees and shrub willow to orange pulp and the pomace left behind after apple cider production, and mixing them with plastics.

The process provides another use for the one billion tons of biomass that can be produced annually in the United States, according to an estimate from the U.S. departments of energy and agriculture. The term “biomass” refers to any biologically derived material.

In addition to being used as strengtheners in plastics, the nanocrystals can be used in ceramics and in biomedical applications such as artificial joints and disposable medical equipment. Using cellulosic nanocrystals to strengthen plastics has advantages over the glass that is often used: Glass is heavier, harder on processing machinery and therefore more expensive to work with, and it stays in the ground for centuries. The cellulose-based composite materials will break down quickly in a landfill.

These cellulose particles have a lifetime in a landfill of less than 90 days, at which time, they turn back into carbon dioxide and water. The cellulose can be reabsorbed by other plants that use it to make more cellulose.

In the future, the process could be tied to the production of cellulosic ethanol. When hemicellulose is removed from wood for fermentation into ethanol, it leaves behind cellulose that can be treated with enzymes and reduced to the nanocrystals. The value of those crystals in industrial uses represents a significant reduction in the cost of producing ethanol.

There are also possibilities in using the nanocrystals in the bioplastics that are being developed at ESF, resulting in strong, lightweight plastics that would degrade in a landfill.

The project is led by Dr. William T. Winter, a chemistry professor and director of the Cellulose Research Institute at ESF. He was assisted in the research by graduate students Jacob Goodrich and Yae Takahashi.
ESF Alumnus wins nation’s top technology Honor

ESF alumnus Dr. Ronald J. Eby, who helped develop a vaccine hailed as one of the most important advances in pediatric medicine, received the nation’s highest honor for technological innovation.

The National Medal of Technology was bestowed upon Eby by President Bush at the White House July 27, 2007.

Eby, who studied chemistry at ESF, was part of a team that developed the vaccine called Prevnar. The vaccine has reduced by up to 75 percent the number of ear infections and cases of pediatric pneumonia and meningitis caused by the Streptococcus pneumoniae bacteria. It is the first vaccine to prevent the consequences of infections from the bacteria.

Eby received his master’s degree and his doctorate at ESF and then went to work with Praxis Biologics in Rochester, where the vaccine was developed. It took nearly 11 years of clinical trials to prove the safety and efficacy of the vaccine.

Eby’s team has received other honors for the Prevnar work, including the 2005 Discoverer’s Award from the Pharmaceutical Research and Manufacturers of America and the 2003 Heroes of Chemistry Award from the American Chemical Society.
Gov. Pataki Announces Major Ethanol Grant

Former New York Governor George Pataki announced a $10.3 million grant to ESF and three commercial partners to develop the first biorefinery in New York in December 2006 at a press conference on the ESF campus.

ESF will work with Catalyst Renewables Corporation headquartered in Dallas, Texas; the engineering firm of O’Brien and Gere, based in Syracuse; and New Energy Capital, one of the country’s leading energy venture capital companies, to develop and construct a pilot commercial cellulosic ethanol facility in Lyonsdale, N.Y.

The new biorefinery will be constructed adjacent to the Catalyst Renewables existing wood-to-energy plant in Lyonsdale, located in Lewis County.

Previously, ESF worked with Catalyst Renewables to establish the first commercial willow plantation in the United States in the Tug Hill area of Jefferson County.

The grant is administered through a partnership from the New York Department of Agriculture and Markets and the New York State Energy Research and Development Authority.

The state grants will be matched by the companies involved, resulting in a significant private investment in the Lyonsdale facility. The project is expected to initially create 48 permanent jobs, with the potential to generate more jobs in the years ahead. In addition, the facilities will create new markets for 45 tons of biomass per day producing 130,000 gallons per year of ethanol, and generate approximately $10 million in the local economies over the next three years.
Groundbreaking Research

ESF Awarded Green Grant to Produce Better Plastics

ESF was awarded a $60,000 grant from Xerox Corporation to explore how to develop biodegradable plastic from chemicals extracted from trees.

ESF’s project will research ways to convert hemicellulose into thermoplastic polyesters. These then can be used to produce biodegradable plastics. In ethanol production, the cellulose is used for fuel production, and the hemicellulose is discarded. ESF’s green polymer project would create a use for the industry-discarded hemicellulose.

Disposable plastic cups, silverware, bags, and even medical devices such as tongue depressors could be made using the biodegradable and recyclable plastic. Locally, the project could have commercial applications for companies such as Tessy Plastics Corp. in Elbridge and medical-device manufacturer Welch Allyn in Skaneateles, N.Y.

Working on the project are Dr. Arthur Stipanovic, chair of the department of chemistry, and Dr. Terry Bluhm, chemistry Ph.D. 1975 and adjunct professor at ESF.
Groundbreaking Research

Choosing the Right Trees Can Affect a City’s Air Quality

ESF researchers have discovered cities can improve their air quality simply by planting the right mix of trees for their climate.

The ideal combination of greenery can increase carbon sequestration and reduce the emission of volatile organic compounds, resulting in better-quality air and a reduction in greenhouse gases, the study shows.

Dr. Allan P. Drew, a forest ecologist and professor at ESF, and Dr. Richard Smardon, professor in the Department of Environmental Studies, worked on the study.

The researchers supplied Syracuse officials with a list of recommendations based on the city’s typical weather conditions. But city officials anywhere could adapt the methods to their own climate.

An increase of carbon in the atmosphere is believed by many researchers to be tied to rising global temperatures. Removing it from the atmosphere and sequestering it in vegetation might help mitigate climate change.

The researchers considered only native species or non-native species that are not invasive.

Students John Domm, Eric Ripley, Janet Tordesillas and Richard Greene also worked on the study.
A study conducted by ESF’s Dr. Dylan Parry and colleagues at the University of Massachusetts is the first to document the link between a fly, Compsilura concinnata, and the browntail moth’s near disappearance. It also points out that the introduction of a non-native insect as a “control agent” can be both unpredictable and far-reaching.

The voracious fly’s parasitic young are known to attack more than 180 species of moths and butterflies. The fly was introduced into the northeastern United States 100 years ago to control pests and did part of its job well, nearly wiping out the invasive browntail moth that defoliated trees throughout New England and plagued humans with an itchy, weepy rash.

The fly, a bit smaller than the common housefly, has also contributed to the decline of several spectacular species of native moths, including the luna and cecropia moth, according to a report in the journal Ecology.

The study was reported in the journal’s November 2006 edition.

Parry and his colleagues transplanted browntail moth colonies into areas that were free of the pests, observed them in the field and took them into the laboratory for a closer look. They discovered that the fly was attacking the moth during its caterpillar stage.

Parry is an insect ecologist in ESF’s Department of Environmental and Forest Biology.
ESF College Foundation has Successful Year

Along with being ahead of schedule to reach its goal of $100 million in assets by 2020, the ESF College Foundation had a number of accomplishments this year:

- Foundation assets exceeded $20 million, which is approximately one year ahead of the annual goal to reach $100 million in 2020
- Alumni participation in giving reached a record high of 32 percent, an outstanding rate for all public and private institutions
- More than $170,000 in income was generated from Foundation-owned forest properties
- The Foundation purchased additional student rental buildings to now house more than 100 students
- Alumnus Arthur Sundt and his wife, Mary, donated a 30-acre ranch in Costa Rica to create the College's first international research field station
- The Foundation increased its scholarship budget by 13 percent to provide nearly $540,000 in funding to ESF students
- More than $150,000 in equipment was purchased for ESF academic programs
- Created an endowment to support the College's new Center for Native People and the Environment
- The Foundation solicited funding to develop the educational arboretum at The Ranger School
- The development website was enhanced to include comprehensive and interactive planned-giving information
Finances and Facilities

Funding for Research Increases

ESF continues to increase the amount of sponsored research taking place at the College. Total expenditures for sponsored research in fiscal year 2006-2007 were approximately $13.25 million. There were 222 proposals submitted for a total of $36.9 million.

HSBC Supports The Ranger School

The ESF Ranger School received a $25,000 grant from the HSBC in the Community (USA) Foundation Inc. and will use the funds to develop the arboretum at The Ranger School campus in the Adirondacks.

The arboretum is a collection of living trees and shrubs, used to complement The Ranger School students' field experience and classroom study.

In addition to Ranger School students, the arboretum is used by local school groups and by visitors with an interest in learning about trees and shrubs.

The HSBC grant is earmarked for trail improvement, procurement of new species, soil improvements, and landscape design.

This is the second year in a row The Ranger School has received a grant from HSBC. Last year, the gift was used to develop an interschool professional development program between The Ranger School and forestry faculty from Bavaria.
Moon Library Receives Makeover

A new Moon rose on the ESF campus in the summer of 2007 as the F. Franklin Moon Library underwent an extreme makeover. The renovation marked the first time since the library opened in 1968 that any major work was done there. The new design enhances the library’s reputation as the academic living room of campus with new computer workstations, new tables and chairs that students can arrange to best suit their needs, and “living spaces” with comfortable chairs and couches.

The library’s mission, vision and values statement focuses on providing a user-friendly environment. This renovation fits those ideas as plans were made based on how students use the library.

The project also falls in line with the College’s commitment to sustainability. The furniture was made by Artistry in Wood of East Syracuse, N.Y. The company follows green manufacturing practices, such as using wood from sustainably managed timberlands, using machinery that reduces the amount of dust particulates released into the air, and working with vendors who also follow green manufacturing practices.

Baker Laboratory Nears Completion

The rehabilitation of Baker Laboratory is nearing completion. The second, third and fourth floors are occupied by the departments of Construction Management and Wood Products Engineering, and Environmental Resources and Forest Engineering. Attractive new computer labs serving the entire campus community are now located on the third floor of Baker.

The one-story wing of the building is currently being renovated and a wood identification lab and a CMWPE classroom opened for the fall semester.

Completion of the multi-phase building project is expected in 2008.
Photovoltaic Arrays Installed on Campus

A 15.48kW photovoltaic (PV) array was installed in August atop the roof of Walters Hall. The PV array was installed by Solar Works, Inc., of Montpelier, Vt. The system consists of 72 Sunpower model SPR-215 high-efficiency solar modules mounted on a ballasted support system on the roof of the first floor. The system is expected to produce approximately 17,000 kW per year. At current electricity costs, this represents an anticipated energy savings of nearly $2,040 per year.

The system includes an education and training partnership with the Syracuse City School District and Onondaga Community College with funding provided by the New York State Energy Research and Development Authority (NYSERDA) and Congressman James Walsh.

A Web site that will allow campus personnel to monitor the output of the system is in development. Energy production as well as atmospheric conditions will be monitored and continuously uploaded to the website.

A photovoltaic system was also installed on Baker Laboratory as part of the building’s $29 million rehabilitation. The photovoltaics double as window shading on the south side of the building.
Finances and Facilities

LA Students Help Develop Campus Master Plan

Students in ESF’s Department of Landscape Architecture are helping the College through the initial process of creating a master plan for the Syracuse campus. During the spring 2007 semester, students facilitated small work sessions to learn what people liked about the campus, what they’d like to see changed and what vision people had for the campus as a whole.

The students will use the information to formulate master plan suggestions for the campus that will be used to guide decisions about campus facilities, grounds and buildings in the years to come.

ESF Establishes New Biological Station in Costa Rica

ESF established a field station for tropical studies in Costa Rica, on property donated to the College by an alumnus.

ESF’s new field station is a 30-acre site in the northwestern part of Costa Rica, near the Pacific Coast. It contains a mix of dry tropical forest and pastureland and will serve as a base of research and teaching operations.

The facility is ESF’s first international field station. The College operates field stations on 25,000 acres of property across New York state and has students and researchers working on all seven continents, but has never before established a permanent field station outside the United States.

The property was donated by Arthur Sundt, a 1959 graduate of ESF, and his wife, Mary, who live in Alaska and for many years spent winters in Costa Rica.

The Sundts asked that the facility be named for two ESF professors who were instrumental in Arthur Sundt’s education: Wilford A. Dence and John L. Morrison.

The field station is on property that once operated as a farm, near the town of Coyolito.
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The College Community
Drs. Gibbs and Teece Receive Foundation Awards

Two associate professors were chosen as recipients of the 2006 Foundation Award for Exceptional Achievement in Teaching.

Dr. James P. Gibbs of the Department of Environmental and Forest Biology and Dr. Mark Teece of the Department of Chemistry received the awards Oct. 24, 2006 during the ESF College Foundation annual meeting.

Gibbs was cited for his dedication in the classroom to more than 200 students each year and service related to professional scholarly activities. Teece was honored for his enthusiasm and ability to make chemistry relevant to people’s daily lives. Both faculty members are known for their accessibility to students and their extraordinary efforts to help students succeed.

The Foundation Award was established in 1999 to celebrate the accomplishments of ESF faculty and staff members who excel at the art of teaching. Recipients are nominated by faculty chairs and selected by a campuswide committee. The Foundation provides winners with a personalized recognition plaque and a cash award of $1,000.
College Community

George Curry Named LA Educator of the Year

DesignIntelligence named ESF’s George W. Curry, a SUNY Distinguished Teaching Professor and the William Kennedy Munsley Distinguished Faculty Chair, a 2007 Landscape Architecture Educator of the Year. Curry was one of only eight educators from around the country to receive the honor. He is a specialist in urban design and historic preservation.

DesignIntelligence is the Design Futures Council’s monthly “Report on the Future” and the repository of articles, original research, and industry news.

Myron Mitchell Named to Governor’s Commission on Higher Ed

Governor Eliot Spitzer appointed Dr. Myron Mitchell to the Governor’s New York State Higher Education Commission.

The commission will provide recommendations on how the state’s institutions of higher education can be enhanced as a means of fostering greater economic development in the state.

Mitchell is a distinguished professor in ESF’s Department of Environmental and Forest Biology. His research involves terrestrial and aquatic ecosystem processes. Mitchell is also director of the College's Council on Hydrologic Systems Science. He serves on the SUNY Research Foundation Board of Directors and regularly serves on National Science Foundation funding panels. In 2006, he received ESF’s Exemplary Researcher Award.

Mitchell was also named a Distinguished Professor by the SUNY Board of Trustees in 2006 in recognition of his scholarship and research.
College Community

American College and University Presidents Commitment to Climate Change

ESF joined colleges nationwide in taking a leadership role to address global warming and create a sustainable world.

President Murphy signed the American College & University Presidents Climate Commitment on behalf of ESF, promising to develop long-range plans to reduce and ultimately neutralize greenhouse gas emissions on campus. Murphy attended a public summit of all the signing institutions June, 2007, in Washington, D.C.

The pledge commits ESF to a number of actions in pursuit of climate neutrality, including the use of green construction practices, purchasing or producing at least 15 percent of the college’s electricity consumption from renewable resources and setting a date to achieve carbon neutrality.

ESF is well positioned for eventual carbon neutrality.

The College has instituted a number of practices to reach these goals. All new campus construction and renovation will be compliant with the U.S. Green Building Council’s (USGBC) Leadership in Energy and Environmental Design (LEED) Standards, and the current Baker Laboratory renovation is being completed to the USGBC LEED Silver standard. All of the College’s diesel vehicles operate on B20 fuel, and an E85 and B20 blending and dispensing facility is under design. The College has installed a 250-kW molten carbonate fuel cell and has two photovoltaic and roof-mounted wind turbine projects expected to be implemented next year.

The College’s target date for carbon neutrality is June 30, 2015.
College Community

Murphy Serves as St. Patrick’s Parade Marshal

President Murphy led hundreds of marchers through downtown Syracuse March 17 in the city’s annual St. Patrick’s Parade.

Along with the Murphy family, scores of ESF students and staff members participated, marching behind a banner that stated, "We Bleed Green." They repeated the theme on their T-shirts and on thousands of "window cling" stickers that were distributed to the crowd.

Behind the marchers was ESF's environmentally friendly bio-diesel bus, decorated with posters telling the story of the College's pioneering work in education, research and service related to the environment. In keeping with the parade’s theme of "Irish Trailblazers," the posters told the story of ESF's "firsts," including the first program in paper science, the first course in urban wildlife, and the first molten carbonate fuel cell in New York.
College Community

Office of Communications Gets New Name, SUNY CUAD Awards

The Office of News and Publications underwent a name change in 2007 to better reflect the mission of the office and is now the Office of Communications to encompass the department’s outreach into new media such as internet broadcasting, video production, and an enhanced Web presence, and its continued strength in the areas of media relations, print publications and special events.

The office received a number of awards at the 2007 SUNY Council for University Advancement (SUNY CUAD) conference, including a Best of Category in Visual Design in Print for the Department of Landscape Architecture Portfolio Day postcard.

The office also received Judges Citations for:

- Excellence in News Writing/General News Writing for news releases
- Electronic Communications for Nature in Your Backyard
- Magazines/full-color magazines for Inside ESF
- One-to-Three Color Newsletters for The Spruce Moose
- Visual Design in Print: Single-page Publications
ESF Launches New Website

ESF's Web presence was completely revamped in early 2007, to bring a fresh look to ESF's many Web sites. Behind-the-scenes code was significantly upgraded, to ensure accessibility and incorporating new technologies.

New components of ESF's Web site (www.esf.edu) add value for users. A Success Stories section shares the accomplishments of notable ESF students, faculty and alumni. Environmental resources are available through the new E-Center, including ESF's Nature in Your Backyard video series, Environmental Information Series articles, Improve Your World audio segments, and links to ESF international research sites. Enhanced web services include advanced job and internship tools, log-in access to undergraduate application status, and an online graduate admission system.

Nature in Your Backyard

The ESF-produced video series Nature in Your Backyard, which focuses on local wildlife, the outdoors and natural phenomena, expanded its audience in 2006-07. Complimentary DVDs were sent to 2,000 science teachers in four states for use in the classroom.

The videos have also been posted on YouTube, where they have become a popular destination.

The two-minute shows are produced under the direction of David E. White, media specialist in ESF's Office of Communications; D. Andrew Saunders, associate director for educational outreach, Roosevelt Wild Life Station and research associate in the Department of Environmental and Forest Biology, and students in Saunders' environmental interpretation classes.
SUNY-ESF

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