SPECTRUM

TODAY'S EDITION

See pages w2 and 4 for additional news coverage.



VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY

http://www.unirel.vt.edu/spectrum/

VOLUME 22 NUMBER 38 FRIDAY, AUGUST 4, 2000

University supporters set new standard for private giving

By Sherry Bithell

Virginia Tech closed the books on fiscal year 1999-00 with another exceptionally strong year in private giving. The university received \$55 million from alumni and friends compared to \$71.4 million for the previous year. Excluding an extraordinary gift of \$23 million in patents and equipment from DuPont to the College of Engineering in 1998-99, this year's results mark the first time the university has reached \$50 million or more in contributions from the private sector.

Among the university's supporters, alumni were the most generous, donating more than \$18 million, a \$1.7-million increase over last year. Students raised their support by 65 percent over the previous year, while their parents followed their lead by

giving \$1.3 million, 82 percent more than last year. Virginia Tech faculty and staff members more than doubled the amount they gave in fiscal year 1998-99, contributing almost \$1.2 million.

A number of colleges and programs were major beneficiaries of this generosity. The College of Agriculture and Life Sciences surpassed last year's total in private support by 89 percent with \$8.3 million in gifts, while the College of Human Resources and Education jumped from \$815,000 to more than \$1.6 million. Donors to the College of Architecture and Urban Studies increased their contributions to \$945,000, more than double what they gave during the previous 12 months. The Virginia-Maryland Regional College of Veterinary Medicine recorded a 54-percent increase over the last fiscal year, and the Marion duPont Scott Equine Medical Center

received \$2.4 million, four times the total from last year. Intercollegiate Athletics, boosted in part by the football team's bid for the national championship, was the recipient of a record \$10 million in contributions.

The university's endowment also saw a significant increase in private funding. The \$19.7 million earmarked for endowment support was \$7.3 million more than fiscal year 1998-99. Funds designated for current operations, capital facilities, and sponsored programs comprised the balance of areas to which donors directed their philanthropy.

The university's strong performance in attracting private support continues two years after the successful completion of a comprehensive fundraising campaign and during a year in which the university raised its national profile in several areas. The year's highlights

included the introduction of the Virginia Bioinformatics Institute which will propel Virginia Tech into a leadership position in the field of bioinformatics; the formation of a partnership with the University of Virginia and Carilion Health System to create a biomedical institute in Roanoke; the conclusion of the first phase of the Smart Road, the nation's first fully instrumented highway; and the culmination of an undefeated football season leading to the team playing for the national championship in the Sugar Bowl. "Each year we establish new milestones and set new records as targets for the following year," said Elizabeth Flanagan, vice president for Development and University Relations. "And this is made possible in large part by the continued generosity of our support-

Tech entomologist deals with Africanized-bee swarm

By Stewart MacInnis

The honey bees that attacked and killed a goat in Low Moor in July were Africanized honey bees, according to U.S. Department of Agriculture scientists who used a computer-assisted identification program to identify the bees.

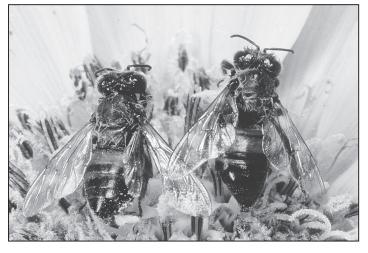
Officials at USDA and at Virginia Tech are quick to caution however that the Africanized bees were probably an isolated swarm that had caught a ride into the area on a truck or rail cars, and it's unlikely there are other colonies.

"There were two 'swarms' at the hive near where the goat was killed. Those clustered on the front of the hive turned out to be the Africanized bees," said Richard Fell, Virginia Tech entomologist. "The bees that were inside the hive were regular European honey bees. Apparently, the Africanized bees were trying to take over the existing hive."

Both clusters of bees were destroyed by Fell and Virginia Tech colleague Eric Day. Although there have not been any other indications or reports of aggressive actions by bees in the area, Fell said that Virginia Tech would be setting up monitoring sites near where the bees were discovered.

Kim Kaplan, an Agricultural Research Service spokesperson, said it is not possible to tell Africanized honey bees (AHB's) from the European or feral bees by eye. Both types of honey bees look almost exactly alike and their venom is also similar. Distinguishing between AHB's and other honey bees is done by trained specialists using a special computer program, she said.

"The behavior of all honey bees runs the (See ENTOMOLOGIST on 4)



Examples of Africanized honey bees. Africanized bees were recently blamed for the death of a goat near Covington. (USDA)

Graduate students adapting to EDT process

By Susan Trulove

A succession of surveys since 1997 of Virginia Tech graduate students who have been creating electronic theses and dissertations (EDT's) indicate the students are adapting more easily to the requirement with each year. Students' comments on the survey forms have gone from, "Give me a damn typewriter," to "Ilaughed, I cried, it became a part of me," and "I think the web site was great!"

As a result of a survey of more than 500 graduates who submitted EDT's between January and May 9, 2000, Gail McMillan, director of the Virginia Tech Digital Library and Archives, reports that more than 75 percent plan to publish some aspect of their work in the next two years.

Of 166 graduate-level alumni who re-

sponded (50 percent return rate) to two surveys sent since November 1998, 58 report they have published some part of their final research. None report resistance from publishers because the work had already been on line, which was an early concern regarding EDT's.

Although library databases indicate thousands of viewings of the EDT's, only 20 percent of the survey responders report actually being directly contacted. Most of the alumni had no idea their work had been downloaded as many times as the library reported. A frequent request was that the authors be informed of who was downloading their research.

Seventeen alumni said being contacted about their electronic document helped advance their research interest; 10 said it helped them locate a job; 13 said the contacts expanded their

network of research colleagues. One alumnus commented, "It really helped in job interviews to let prospective employers see examples of my research and writing skills."

Fifty alumni said they received positive comments and three received negative comments. One person wrote, "I have not been contacted, but I have run into a few people at conferences who have said they read and enjoyed my work."

Ninety-six percent of the graduate alumni responding to the survey report they are satisfied that their work is more widely known and appreciated as a result of EDT's being accessible.

Find 2,610 EDT's at http://scholar.lib.yt.edu/theses/.

Summer orientation receives high marks from students

By Kimberly Richards-Thomas

Virginia Tech hosted approximately 4,500 students and 7,500 parents during this year's summer-orientation program, held July 5 through July 28. The program consisted of 14 day-and-a-half sessions.

"Our mission is to help students feel more comfortable and confident about their decision to come here in August," said Greg Wollcott, orientation administrator. According to Wollcott, Tech's orientation program consistently receives high evaluations from attendants, and this year

(See SUMMER on 4)

ACTIVITIES

Events

Friday, 4

Summer Arts Festival Program, Main Street: Call 951-0454 for information.

Saturday, 5

Summer Arts Festival Program, Main Street: Call 951-0454 for information.

YMCA Hike, 9 a.m., Lancaster House parking lot.

Wednesday, 9

"With Good Reason," 7 p.m., WVTF: Topic TBA.

Thursday, 10 Classes End.

Friday, 11 Exams Begin.

Saturday, 12 Exams End.

Sunday, 13

YMCA Hike, 1:30 p.m., Lancaster House parking lot.

Monday, 14

GTA Fall Workshop, through 8-16.

Tuesday, 15

Faculty Development Workshop: Call 8029 for time, location.

Wednesday, 16

Salary and Wage Paydate.

"With Good Reason," 7 p.m., WVTF: Topic TBA.

Thursday, 17

Staff Senate, 5:30 p.m., 1810 Litton-Reaves.

McNair receives American Chemical Society award

By Sally Harris

Harold McNair of the Virginia Tech chemistry department has won the Year 2000 Calvin Giddings Award from the Analytical Division of the American Chemical Society (ACS).

The award recognizes outstanding contribution to the field of analytical chemistry, both in teaching and research. Calvin Giddings was an outstanding educator at the University of Utah and a prolific writer, with more than 1,000 technical publications and more than eight textbooks to his credit. The award, together with a \$5,000 prize, will be presented to McNair in August at the national meeting of the ACS in Washington, D.C.

McNair did his undergraduate work at the University of Arizona graduate studies at Purdue University and was a Fulbright post-doctoral fellow at Eindhoven Technical University, the Netherlands. He came to Virginia Tech in 1968 and has been awarded both national and international awards in teaching and research, including the Tswett Medal in Chromatography

from the Russian Academy of Sciences, the Colacro Medal, the Keene Dimick Award, and the Dal Nogare Award. He has published more than 150 original research papers and supervised more than 50 graduate theses.

McNair's research interests are the isolation, concentration, and characterization of organic molecules by gas chromatography, gas chromatography, mass spectrometry, and high-performance liquid chromatography. His current analyses of interest include pesticides in soils and foods, biogenic amines in fish, trace bomb residues in air, water, and soil samples, polynuclear aromatics (PNA's) and polychlorinated byphenyls (PCB's) in water and soils.

"One project involves the use of microwaves to rapidly extract pesticides from soil samples and determine trace levels (parts per billion) using gas-chromatography/mass spectrometry," McNair said. The research has been partially funded by both CEM Corp. of Mathews, N.C., and E.I. duPont of Wilmington, Del. "We have developed a rapid, six-minute direct analysis, by gas chromatography, of nine carbamate pesticides," McNair said. "The method relies on a fast gas-chromatography technique that uses short columns, thin films, and fast flow rates and a cold-on-column injector, which is a new technique that keeps the carbamate at room temperature for injection into the gas-chromatography instrument."

McNair also has been actively working on bomb vapors on behalf of the Federal Aviation Administration (FAA) for the past three years, supported by a three-year, \$320,000 grant from the FAA Technical Center in Atlantic City, N.J. "One environmental aspect is to develop simple field sampling methods to trap odors characteristic of bombs or other toxic materials, McNair said. "We later use a variety of techniques, including gas chromatography, high-performance liquid chromatography, and Headspace gas-chromatography/mass spectrometry to determine the quantity of the trace levels."

Kershaw to direct graduate recruiting

By Susan Trulove

Marilyn Kershaw, a higher-education administrator with more than 10 years of experience in student and academic affairs, has been named director of graduate-student recruiting, according to Eugene Brown, associate provost for program development in Research and Graduate Studies.

Kershaw, who has been with the Academic Resource Center at Temple University for three years, most recently as assistant director, began her duties at Virginia Tech on July 17.

"Marilyn has worked with a variety of constituencies to build successful programs that increase student opportunities and successes," Brown said. "She will help the university achieve its research and graduate-education goals."

Kershaw received her undergraduate degree in health science and education in 1976 from the State University of New York at Cortland. "I've always been interested in education. I love the changing, challenging, questioning atmosphere and I like to work with students," she said.

In the early 1980s she worked in student recruitment at Eastern Washington University in Cheney and earned a master of education degree in guidance and counseling from Whitworth College in Spokane.

Kershaw held administrative positions at Oberlin College and the College of Wooster before joining Temple University in 1994. She also began doctoral studies in higher-education administration at Temple.

At Oberlin, she worked with the community and with the faculty to increase the numbers of students who enrolled and to make sure they graduated.

 $(See\ KERSHAW\ on\ 4)$

Wright named to Gary Professorship in horticulture

By Stewart MacInnis

Robert D. Wright has been named the Julian H. Gary and Margaret S. Gary professor of horticulture by the Virginia Tech Board of Visitors.

The endowed professorship was established in 1998 with a bequest from the estate of Margaret Gary, who died in 1997. Julian Gary died in 1985.

A Blacksburg resident, Wright is head of the university's Department of Horticulture. He joined the Virginia Tech faculty in 1973 after two years as an assistant professor at the University of Tennessee at Martin. He earned his doctorate from Purdue University in 1971. He earned a master's degree in horticulture from the University of Tennessee at Knoxville in 1968, and a bachelor's degree in agriculture from the University of Tennessee at Martin in 1965.

Wright has been recognized nationally for his research, teaching, and contributions to the field of horticulture.

In 1988, he was the first recipient of the American Society of Horticultural Science's Outstanding Achievement Award in Nursery Crops. He also is the recipient of the Southern Nurseryman's Association's Heneger Memorial Research Award.

Wright has the directed the work of numerous doctoral students, many of whom now hold leadership positions in industry and at major universities. Last year, of five environmental awards presented to scientists by

the Southern Nurseryman's Association, three received their doctorates under Wright's direction.

Through his research he developed a procedure to extract nutrients from the substrates of container-grown nursery crops, which is now the accepted standard nationally. In recent years this procedure has been promoted for the cultivation of greenhouse crops as well.

As head of the Department of Horticulture, Wright was instrumental in developing an urban horticulture center for nursery and landscape research and teaching. He also established a regional landscape-contracting advisory council that assisted the department in developing its landscape-contracting curriculum into one of the best in the nation.

Personnel Information

The following table has been provided by Personnel Services to illustrate changes in the accumulation of annual leave by classified employees. Please see the July 21 issue of *Spectrum* for an article detailing these changes.

Annual Leave Classified Employees

(effective July 10, 2000)

| Years of Service | Hours Earned Per Pay Period | Hours accrued per Year | Maximum Carry Over | Maximum Payout Limit |
|---------------------|--------------------------------|------------------------|-----------------------|-------------------------|
| 0-4 | 4 hours | 96 hours (12 days) | 192 hours (24 days) | 192 hours (24 days) |
| 5-9 | 5 hours | 120 hours (15 days) | 240 hours (30 days) | 240 hours (30 days) |
| 10-14 | 6 hours | 144 hours (18 days) | 288 hours (36 days) | 288 hours (36 days) |
| 15-19 | 7 hours | 168 hours (21 days) | 336 hours (42 days) | 288 hours (36 days) |
| 20-24 | 8 hours | 192 hours (24 days) | 384 hours (48 days) | 336 hours (42 days) |
| 25 or more | 9 hours | 216 hours (27days) | 432 hours 54(days) | 336 hours (42 days) |

Jacobsen receives Udall Scholarship

By Sally Harris

Udall Scholar Krista Jacobsen, a rising senior at Virginia Tech, is tackling a very big project: saving the environment.

Jacobsen, a biology major in the College of Arts and Sciences, has not wasted any time beginning to work on her goal. She has already done field work on Southwest Iowa's Wabash Trace and on the Savannah River, tracked the movement of wildlife such as ocelots, jaguarundis, coatis, and collared peccaries in Costa Rica, and worked with T.R.E.E., or Taking Responsibility for the Earth and Environment, the campus environment activist organization.

The Morris K. Udall Scholarship of \$5,000 is designated for students in fields related to the environment or for Native American and Alaska Native students in fields related to health care or tribal policy. Congress established the Morris K. Udall Scholarship and Excellence in National Environmental Policy Foundation in 1992

(See JACOBSEN on 4)

CLASSIFIED POSITIONS

The following classified positions are currently available. More details of these positions, specific application procedures and positionclosing dates may be found on the Personnel Services web site at http://www.ps.vt.edu. Available positions are also listed on the Job Line, a 24-hour recorded message service. For information on all job listings, call 1-5300. Some of the following positions include state benefits. Positions with numbers beginning with a "W" are hourly and do not include state benefits. Individuals with disabilities desiring assistance or accommodation in the application process should call by the application deadline.

Closing date for advertised positions is 1 p.m. Monday. An EO/AA employer committed to diversity.

Full Time

Accountant, N/A, Grade 9, Virginia Tech Foundation.

Accountant, 4522F, Grade 9, University

Animal Care Supervisor, 6998J, Grade 11, Veterinary Teaching Hospital.

Animal Care Technician B, 496J, Grade

5, Veterinary Teaching Hospital. **Animal Care Technician C**, 2639J, Grade 7, Veterinary Teaching Hospital.

Applications Analyst, 2145L, Grade 0, Web Application Research and Development.

Applications Analyst, 1226L, Grade 0, Web Application Research/Development.

Architect Senior, 7643G, Grade 13, Office of University Architect.

Banquet Manager (Food Operations Manager Assistant), 1118G, Grade 6, DBHCC. Boiler Operator, 050G, Grade 6, Power

Boiler Operator Assistant, 338G, Grade 4, Power Plant.

Bookkeeper/Technical Typist (Program Support Technician), 1896T, Grade 6, Statis-

Budget Analyst, 6927T, Grade 10, Budget/Financial Planning.

Business Researcher, 7616D, Grade 11, VTIC

Computer Network Support Technician Senior, 3492G, Grade 10, EHS.

Computer Network Support Technician Senior, 6510T, Grade 10, Philosophy.

Computer Systems Engineer, 0180T, Grade 14, Computer Science.



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Letters to the editor and questions for "Ask Spectrum" Should be addressed to the editor, 105 Media Building, Virginia Tech, Blacksburg, VA 24061. Electronic Spectrum: http://www.vt.edu:10021/admin/

eoaa/index.html.

Virginia Tech does not discriminate against employess, students, or applicants on the basis of race, color, gender, sexual orientation, disability, age, veteran status, national origin, religion, or political affiliation. Anyone having questions concerning discrimination or accessibility regarding the programs described in this newspaper should contact the Equal Opportunity Affirmative Action Office: 540-231-7500 (v), 540-231-9460 (TTY).

Data Warehouse Architect 67011 Grade 0. Information Systems/Computing

Electrician, 7565G, Grade 7, Physical Plant. Electronic Technician Supervisor, 7632J,

Executive Secretary, 7473T, Grade 6, Provost

Executive Secretary, 5127M, Grade 6, CALS/4-H

Executive Secretary, 2870G, Grade 6, Physical Plant.

Thirteen full-time food-operations positions available; five part-time positions.

Food Operations Manager A/Sous Chef, 0395, Grade 8, Residential/Dining Programs/ Owens Food Court.

Food Operations Manager A/Sous Chef. 0940H, Grade 8, Residential/Dining Programs/ Southgate Bake Shop.

Food Operations Manager B/Executive Chef, 0266H, Grade 10, Residential/Dining Programs/Shultz Dining Center.

Food Production Worker A/Food Production Supervisor, 0558H, Grade 3, Residential and Dining Programs/Owens Dining Center.

Grants Specialist (Fiscal Manager), 7613T, Grade 9, Virginia Bioinformatics Institute.

Housekeeping Supervisor, 0824, Grade 4, Residential/Dining Programs.

Housekeeping Worker, 1631G, Grade 1, DBHCC. Housekeeping Worker, 7605C, Grade 1,

Physical Plant. Housekeeping Worker, 1025H, Grade 1,

Residential/Dining Programs. Housekeeping Worker Senior, 6926H,

Grade 3, Residential/Dining Programs. Instructional Technologist (Programmer/

Analyst), 7500M, Grade 12, Agricultural, Natural/Human Resources Information Technology.

Interpreter for the Deaf, 7472J, Grade 8, Dean of Students. Laboratory Instrument Maker, 1005T,

Grade 10, ISE Laboratory Mechanic C, 7606T, Grade 8,

CPES. Laboratory Specialist, 7624T, Grade 8,

Chemical Engineering. Laboratory Specialist Senior, 7614T,

Grade 9, Biology Laboratory Specialist Senior, 7645M,

Grade 9, PPWS. Learning Technology Systems Integrator, 7426L, Grade 15, Educational Technolo-

Library Specialist, 1043F, Grade 9, Uni-

versity Libraries/Technical Services Medical Technologist, 2637J, Grade 9,

Veterinary Teaching Hospital. New Media Center Operations Assistant.

7647L. Grade 9. Instructional Services. Office Services Specialist, 1719T, Grade

5, University Registrar. Office Services Specialist, 1310T, Grade

5, University Registrar. Office Services Specialist, LCO68F,

Grade 5, Hokie Passport.

Oracle Dba, 6779D, Grade 0, ISC.

Photocopy Technician, 1783A, Grade 4, Printing Services.

Printing Press Operator B, 1342A, Grade 6, Printing Services. Program Support Technician, 1410J,

Grade 6, Systems Research Center Program Support Technician, 3078T,

Grade 6. Statistics Program Support Technician, 1583T,

Grade 6, Sociology. Program Support Technician, 2960G,

Grade 6, International Programs. Program Support Technician, 2718T,

Grade 6. Personnel Services. Program Support Technician, 7627T,

Grade 6. Engineering. Program Support Technician (Asst. Mgr. for Guest Services), 6685G, Grade 6, DBHCC.

Program Support Technician Sr, 7634J, Grade 7, VCCER.

Programmer, 6656F, Grade 10, University Libraries

Programmer, 1864F, Grade 10, University Libraries.

Programmer Analyst, 1643T, Grade 12, Budget/Financial Planning.

Programmer Analyst, 7365T, Grade 12,

Programmer/Analyst, N/A, Grade 13, Virginia Tech Foundation, Inc.

Public Relations Assistant Specialist. LC076L, Grade 8, Alumni Relations.

Research Software Developer, 7637T, Grade 14, Virginia Bioinformatics Institute.

Security Guard, W020470G, Grade 2, Police Department. Student Services Specialist, 7648T, Grade

8, University Honors-Provost. Systems Administrator, 7636T, Grade 16,

Virginia Bioinformatics Institute. Trades Utilities Senior Worker, 7115G,

Grade 6, Physical Plant. Turbine Operator, 2220G, Grade 6, Physi-

cal Plant/Power Plant. University Records Manager, 7626G,

Grade 11, Records Management Services Part Time

Agricultural Technician B, W022203J, Grade 5, Veterinary Teaching Hospital.

Fiscal Assistant, W022977M, Grade 5, Biochemistry.

Fiscal Assistant, W023088T, Grade 5, Women's Center. Housekeeping Worker, W020190C, Grade

1, Physical Plant/Housekeeping Services. Housekeeping Worker, W020574G, Grade

1, DBHCC. Housekeeping Worker, W022490H, Grade

1, Residential/Dining Programs. Installation/Repair Technician. W023093T, Grade 8, Mathematics.

Instrument/Equipment Technician, W023046T, Grade 8, Music Department.

Laboratory Technician, W022433M, Grade 4, PPWS.

Laboratory Technician Senior. W020627T, Grade 5, Chemistry Laboratory Technician Senior.

W020117T, Grade 5, EHSS. Office Services Assistant, W022260J,

Grade 4, Veterinary Teaching Hospital. Office Services Assistant, W022356G, Grade 4. DBHCC.

Office Services Assistant, W023094F, Grade 4, University Libraries, Circulation/Reserve Desk.

Office Services Specialist, W023044J, Grade 5, Dean of Students.

Pharmacy Assistant A, W020839J, Grade 4, Veterinary Teaching Hospital.

Program Support Technician, W023083J, Grade 6 Athletics

Program Support Technician, W023092F. Grade 6, University Libraries/Digital Library and Archives.

Program Support Technician, W022536J, Grade 6, Athletics

Radiologic Technologist, W022238J, Grade 7, Health Center.

Recreation Supervisor A, W022916J, Grade 6. Adult Day Services.

Research Specialist, W023095M, Grade

Security Guard, W023055G, Grade 2, Police Department.

Storekeeper Helper (Pick-up/Delivery Driver), 023091A, Grade 2, Printing Services. Trades Utility Worker, W023090J, Grade

Trades/Utilities Worker, W022966H, Grade 3, Residential/Dining Programs/Facilities. Web Content Designer, W023068T, Grade 10, Computer Science.

Off Campus

3, VTTI.

Announcer, W020800L, Grade 8, University Relations/WVTF.

Executive Secretary, 2092J, Grade 6, Northern Virginia Center. Human Services Program Specialist,

7644J, Grade 11, CPAP. Office Services Assistant, 6587J, Grade

HNFE. Office Services Assistant, 6816J, Grade 4 HNFF

Office Services Assistant, 6589J, Grade 4. HNFE.

Office Services Assistant (Efnep Program Assistant), 5899M, Grade 4, VCE-Hampton City.

FACULTY POSITIONS

INSTRUCTIONAL

Department of Finance, Insurance, Business Law. Assistant Professors (2). Contact: John Easterwood, 1016 Pamplin (0221). Review begins December 15.

NON-INSTRUCTIONAL

Virginia Cooperative Extension. Extension Agent, Family/Consumer Sciences. #FA691, Management, Housing, and Consumer Education, Fauquier Co. Contact: John Dooley, 121 Hutcheson (0437). Review begins August

Virginia Cooperative Extension. Extension Agent, 4-H Youth Development. #FA710, Lunenburg Co. Contact: Robert Ray Meadows. 121 Hutcheson (0437), Review begins August 14.

Virginia Cooperative Extension. Extension Agent, 4-H Youth Development Curriculum/Learning Process. #F3226. Contact: Robert Ray Meadows, 121 Hutcheson (0437). Review begins August 14.

Virginia Cooperative Extension, Program Director, Southwest Virginia 4-H Educational Center (restricted). #FA743. Robert Ray Meadows, 121 Hutcheson (0437). Review begins July 28.

Virginia Cooperative Extension. Extension Specialist, 4-H Staff Development/Youth Camping. #112080. Contact: Robert Rav Meadows, 121 Hutcheson (0437). Review begins August 14.

Virginia Cooperative Extension. Extension Agent, Agriculture/Natural Resources. #112075, Crop and Soil Science, Patrick Co. Contact: Steve Umberger, 121 Hutcheson (0437). Review begins July 28.

Virginia Cooperative Extension. Extension Agent, 4-H Youth Development. #112073, Southampton Co. Contact: Robert Ray Meadows, 121 Hutcheson (0437). Review begins August 14.

Virginia Cooperative Extension. Extension Agent, 4-H Youth Development. #112072. Prince Edward Co. Contact: Bobert Bay Meadows. 121 Hutcheson (0437). Review begins August 14.

Virginia Cooperative Extension. Extension Agent, Agriculture/Natural Resources. #112071, Dairy Science, Culpeper Co. Contact: Steve Umberger, 121 Hutcheson (0437). Review begins August 14.

Virginia Cooperative Extension, Extension Agent, Family/Consumer Sciences. #112068. Management, Housing, and Consumer Sciences, Page Co. Contact: John Dooley, 121 Hutcheson (0437). Review begins August 14.

Virginia Cooperative Extension. Extension Agent, Family/Consumer Sciences. #112069. Management, Housing, and Consumer Sciences, City of Hampton. Contact: John Dooley, 121 Hutcheson (0437). Review begins August 14.

Virginia Cooperative Extension. Extension Agent, Agriculture/Natural Resources. #112070. Farm Business Management. Lunenburg Co. Contact: Steve Umberger, 121 Hutcheson (0437). Review begins August 14.

Richmond Extended Campus Center. Director, Information Technology Programs/ Director, Extended Campus. Contact: Dixon Hanna, 330 Burruss (0132). Review begins July

University Development. Director of Development, College of Natural Resources. Contact: Thimothy Corvin, 201 Pack Bldg. (0336). Review begins immediately.

President's Office. Assistant to the President. Contact: Carole Nickerson, 210 Burruss (0131). Review begins August 7.

OBITUARIES

Sam Obenshain, 96

Samuel S. Obenshain, a nationally known soil scientist, retired professor, and local farmer, died July 25 at the age of 96.

Obenshain was the first soil scientist on the faculty at Virginia Tech, and he is credited with creating the premier soil survey and interpretation educational program in the nation. He taught at the university from 1933 until his retirement in 1969.

He promoted the use of high-quality soil surveys, which are used extensively in agriculture. He is especially recognized for pioneering the use of soil surveys in urbanizing areas.

Obenshain earned a bachelor's degree in agronomy from Virginia Tech, a master's degree in soils from Texas A&M, and a doctorate in

soil fertility from Iowa State University.

After specialized training in 1948, Obenshain became the first person at Virginia Tech authorized to use radioactive isotopes in research.

In addition to his academic career, Obenshain established a soil consulting company, and operated a farm near Blacksburg.

He was active in the American Society of Agronomy, the Soil Science Society of America, the American Association for the Advancement of Science, and the Virginia Academy of Science.

He was awarded the outstanding graduate award from Virginia Tech's College of Agriculture and Life Sciences in 1985. In 1997, he received the college's Ag Alumni Citation.

Mehdi Adldoost, 45

By Jean Elliott

Mehdi Adldoost, managing director of the Donaldson Brown Hotel and Conference Center, died suddenly on Sunday, July 30. He was 45. Director of the on-campus hospitality facility since July 1997, Adldoost was also a faculty member in the Department of Hospitality and Tourism Management.

Born in Tehran, Iran, Adldoost received his undergraduate degree from the College of Gazalli in industrial management and marketing. He went on to earn an MBA at James Madison University and continued his education through hospitality programs at Holiday Inn University.

"Mehdi's sudden death is a shock to the

university community," said Ted Settle, Tech's director of continuing education and Adldoost's supervisor. "His warm demeanor and smiling face have greeted and welcomed visitors to the Donaldson Brown Center for several years."

In addition to running the hotel and conference center, Adldoost taught a class in lodging management, served on departmental committees, advised students and organized industry workshops. He also was a central figure in planning for Tech's proposed alumni center and hotel project.

Before coming to Tech in 1996 as the hotel's operating manager, Adldoost had served in various general-management positions in the hospitality industry since 1979.

Tech submarine finishes first

By Liz Crumbley

For sheer enthusiasm and love of his project, no one outshines Ron Callis, captain of the Human-Powered Submarine Team. So it comes as no surprise that the Virginia Tech team finished first in the national Human Powered Submarine Contest held in Escondido, California.

The Tech team took five first places and three second places in the eight areas of awards. They secured firsts for overall engineering, safety, speed, presentation, and manufacturing. The seconds were for design, innovation, and in-water operation. The team was advised by Wayne Neu of the aerospace and ocean engineering department.

Callis, a senior in mechanical engineering who graduated this past spring, has been part of the team since his freshman year. The submarine team is a student organization and, although some of the members participate as part of their senior design project, most work on the submarine for personal satisfaction.

The workings of submarine, named Phantom III, are low-tech-bicycle gears welded to a propeller shaft. Engineering talent and knowhow shows up in the unique use of simple mechanisms and the design and construction of the hull.

As a sophomore, Callis researched flow analysis so he could design the perfect hull size and shape for maximum speed. "A constant, smooth curvature is the secret to reducing drag," he discovered. Callis and his teammates constructed a vacuum-sealed hull of two thin layers of fiberglass with foam in between-only one-half-inch thick, yet strong enough to withstand water pressure at a depth of more than 40 feet.

"We've created a product that represents Virginia Tech and represents it well," he said.

ENTOMOLOGIST

Continued from 1

continuum from docile to aggressive, depending on a number of factors including weather and the availability of nectar.," Kaplan said. "AHB's tend to be more defensive, stinging in greater numbers with less provocation. But they sting in defense of their nest; a single honey bee out looking for nectar is not dangerous unless you are allergic to bee stings."

The chances of being killed by honey bees of any sort are actually less than the chances of being hit by lightning, according to Center for Disease Control statistics.

Africanized honey bees (AHB's) are the hybrid of African honey bees, which were brought to Brazil in 1956 and accidentally released, and honey bees referred to as feral bees or European honey bees (EHB's), which were originally brought to the New World by European colonialists. Honey bees are not native to the U.S. AHB's spread north and south from Brazil and were first found in the U.S. in Hidalgo, TX in 1990. Since then they have spread to Texas, Arizona, New Mexico, California, and Nevada as well as Puerto Rico and the U.S. Virgin Islands.

In addition, each year, a number of swarms are found to have hitched rides on ships, trains, and trucks, coming either from the Southwest

U.S. or ships coming from South or Central America. Since January 2000, four such human-assisted transports have been identified as AHB's: one found in West Virginia, believed to have come from Brazil, two in Illinois, and this one in Virginia. In 1996, a swarm is believed to have gotten off a ship in Norfolk but wasn't discovered until it showed up in Maine, transported there by truck. The swarm was placed outside and the bees froze.

This year, on July 5, bees attacked and killed an adult goat owned by James L. Downey in Low Moor. This goat was tethered about 20 feet from an active hive on a cloudy, rainy day. Downey tried to rescue the goat during the attack but was driven off by bees. Downey, his wife, and a sheriff's deputy had to be treated at a local hospital for bee stings. Members of the local fire department were eventually able to wash the bees off the goat but it died about 30 minutes later.

The next week, Day and Fell went to Low Moor and destroyed the hive, including the bees outside the hive. Day said the Africanized bees were most likely destroyed before they could establish a colony or reproduce with the European honey bees. Samples from the hive were then sent to an Agricultural Research Service laboratory in Beltsville for positive identification.

SUMMER

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was no exception. "A preliminary look at the numbers shows that 90 to 99 percent of the students agree we have achieved our goal," he said.

One of the most well-received activities this year was the "21st Century Classroom," a new program instituted by the Provost's Office to address the university's computer requirement. Because all entering freshmen must purchase a computer, this program was

developed to give parents a firsthand look at how technology will be incorporated into various courses.

While students met with campus representatives on the first day, parents attended sessions on topics ranging from judicial affairs to student safety. On the second day, students met with advisors from their respective colleges and attended to administrative details. They left orientation with Hokie Passports, active e-mail addresses, and class schedules in-hand.

JACOBSON

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to honor Congressman Morris Udall and his legacy of public service.

Jacobsen is now studying such things as ecology, plant evolution, and environmental problems, population, and development. According to Jay Sullivan, an associate professor offorestry, aprevious area of study of Jacobsen's, Jacobsen has taken an extremely "active role in developing a program that meets her environmental career goals."

Jacobsen spent the Spring 2000 semester in Costa Rica in a field course in resource management and sustainable development through the Institute for Central American Development Studies. She studied the natural and political history and language of Costa Rica, examined the most serious threats to Costa Rica's people and environment, and, as an independent study, tracked wildlife movement through a tropical dry-forest habitat corridor between Palo Verde National Park and Lomas Barbudal Biological Reserve...

This summer, Jacobsen is working under an Energy Research Undergraduate Laboratory Fellowship at the Pacific Northwest National Laboratory in Richland, Wash.

"I am awed each time I communicate with her about the demise of our environment and am extremely impressed with her broad range of knowledge for correcting environmental problems," said Don Cherry, professor zoology, her course advisor and professor. "Her intensity and motivation for environmental protection are outstanding with a commitment so mature in a person still so young." Cherry said Jacobsen is "a rare scholar."

Jacobsen has won numerous awards, including the Abernathy Leadership Award, the Paul Derring Scholarship, and the Thomas Jones Scholarship. She has been named a Virginia Tech Scholar yearly from 1997 to the

present, was a State of Iowa Scholar in 1997, and has been on the Dean's List since 1997. She is a member of several honor societies in her field of study.

"Few students are more engaged with learning and life than Krista," said Robert Jones, associate professor of plant ecology. "In the environmental arena, a student ought to be mature, broad minded, flexible, and able to handle the stress of contentious situations. In my opinion, Krista possesses all of these traits."

KERSHAW

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"That is something like what I will be doing at Virginia Tech," Kershaw said. "Here, I will be working with department administrators and faculty members to help the university meet its goal to increase the number of graduate students, particularly the number of minority graduate students, and to help graduate students succeed.

"I will also be working with other institutions and minority-run businesses to enhance and develop faculty-member and student exchanges and will help promote sponsorship for research activities that involve and support students."

At Virginia Tech, Kershaw will soon convene an ad-hoc committee for minority graduate-student recruitment to look at building an effective recruitment process. In August, she will participate in the Emerging Leaders workshop. The program hosts faculty members and students from historically black colleges and universities for workshops at the Hotel Roanoke and Virginia Tech on how to succeed in graduate school and in industry, and for visits to campus centers and departments.

Kershaw will also be a leader at the transition weekend for new graduate students this fall, and at the graduate school preview weekend in the spring.

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