Imagine a college course that gives students the opportunity to watch an endangered clouded leopard give birth. Or a lab experience that has undergraduates using cutting-edge reproductive technologies to preserve sperm and eggs from scimitar-horned oryx. Students attending the newly renamed Smithsonian-Mason School of Conservation get to do just that, gaining hands-on experience working with endangered species while earning a minor in conservation studies at George Mason University or 16 transfer credits to their home institution.

This unique program brings together students interested in conservation with Mason faculty, Smithsonian scientists, and local and international experts from conservation organizations during an intensive 16-week collaboration. Much like a semester abroad, the students live and work side-by-side with Smithsonian and Mason scientists at the Smithsonian Conservation Biology Institute (SCBI), a 3,200-acre facility in Front Royal, Virginia, where they are surrounded by about 25 endangered species, including Mongolian horses and black-footed ferrets.

“I don’t think there’s another learning experience like it in the world,” says Executive Director Alonso Aguirre, describing the two semester-long programs that are open to upper-level undergraduate students from any college or university. “Our students come from a wide variety of backgrounds and majors. Many have focused on biology, but we increasingly see others with policy, psychology, and international affairs backgrounds. All of them come with a passion to make a difference.”

**Growing the Program**

According to Dr. Aguirre, who is also Associate Professor in Mason's Department of Environmental Science and Policy, University officials reached an agreement with the Smithsonian in 2008. Mason agreed to build living facilities for faculty, staff, and students, including amenities such as a gym, library, and dining hall. Construction just wrapped up on new student dorms with 60 double-occupancy...
Wolves continued from page 1

bedrooms divided into two wings, one for undergraduates and another for graduate students and professionals. The Smithsonian agreed to build the academic center with state-of-the-art classrooms, a computer lab, distance learning facilities, two teaching laboratories, and offices for faculty and staff, which will be open at the start of the fall semester.

This increase in the amount of learning and living space at SCBI has allowed Mason to expand its undergraduate academic offerings to two 16-credit programs offered during both fall and spring semesters: Applied Conservation Strategies and Ecology for Effective Conservation Practices. Each program can enroll up to 20 students in five interdisciplinary courses in Conservation Studies that emphasize critical thinking and experiential learning.

The Applied Conservation Strategies course, which will be offered for the sixth time this fall, focuses on the economic, socio-political, and scientific causes and consequences of human environmental impacts. During the semester, students conduct an in-depth analysis of global conservation issues and propose mitigation strategies. Students interact with more than 50 expert guest instructors ranging from state wildlife biologists and ecologists to policymakers and “green” developers.

Ecology for Effective Conservation Practices (EECP) is a new program beginning in fall 2012 where students learn the theory and application of ecology for conservation, as well as principles for effective communication. Applicants must have taken at least one upper-level ecology course before attending. During the semester, participants develop a monitoring plan for an endangered species or ecosystem, as well as a communication plan for relevant stakeholders.

In addition, students in both course programs have the opportunity to develop in-depth, hands-on experience by participating in individual practicums. During their practicums, students work closely with conservation professionals, such as researchers, sustainable farmers, or wildlife rehabilitation specialists.

Enrollment is still open for both semesters of study. Dr. Aguirre describes how School of Conservation students will work with Smithsonian scientists in the Virginia Working Landscapes project to restore Virginia grasslands, an ecosystem that was destroyed when non-native grasses introduced by European settlers took over the area. “This is very important to local wildlife,” he says, noting that a declining bluebird population can be tied to the demise of the native grasslands.

“Both programs are very fast-paced,” says Dr. Aguirre. “Every day is different. Students might visit with local farmers to learn about land protection strategies one day and then turn around the next day and use camera trap data to monitor local wildlife populations.” Once the new Ecology for Effective Conservation Practices curriculum is established and doing well, Dr. Aguirre hopes to

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develop the two semesters into an accelerated master’s program at Mason.

**Campus as Curriculum**
Located near the small town of Front Royal in the picturesque foothills of the Blue Ridge Mountains, the Smithsonian-Mason School of Conservation’s fairly remote location within the SCBI, plays an important part in the programs’ immersive feel. Students live near endangered animals, including cheetahs and Eurasian cranes, as well as less exotic plant and animal species that are indigenous to the Shenandoah Valley. During the semester they might investigate the area’s streams, monitor the air quality, or study the local insect population.

Program participant and Mason integrative studies major Giulia Manno believes that all the time spent outdoors in the fields and streams is what makes the Smithsonian-Mason School of Conservation so special. “You get to go outside the classroom, and you’re in the mountains,” Ms. Manno said in a February 2012 interview. “From our dorms, you can hear the wolves howling at night.”

As Executive Director, Dr. Aguirre feels it is the School of Conservation’s responsibility to engage the town’s approximately 14,000 residents and make them feel involved in what the students and professors are doing. “We need to reach out to the people, not just the animals,” he says. He and other School of Conservation staff members are working with the Front Royal Chamber of Commerce and local community organizations to ensure that area middle and high school students can benefit from the expert faculty and programs the School offers. “Educational activities and summer camps can really increase our pipeline of students interested in the sciences, and conservation specifically,” he adds.

Dr. Aguirre explains that the School of Conservation also tries to involve the local community by making its facilities available for wine tastings, art exhibitions, and even wedding receptions. “We want residents of Front Royal to feel that they are a part of the School, and its buildings and grounds are familiar,” he explains. “We also want them to welcome our students when they go into town on the weekend for restaurants and entertainment.”

This will be especially important when the School of Conservation welcomes up to 40 new students to campus for the fall semester. So far, more than half of the incoming class is from Mason or other Virginia institutions, including Longwood University and the College of William and Mary. The remainder of the students are from out-of-state institutions, such as St. Olaf College, UC-Davis, and Texas A&M.

Many of the programs’ students will go on to apply their experiences in Front Royal to jobs in conservation-related fields. George Mason University student Lissett Medrano was majoring in global affairs when she attended the program in fall 2010. “I always had a passion about conservation,” she said in an earlier interview, “but I never really thought my interests could apply to a career. After the Smithsonian-Mason semester, I realized this is what I want[ed] to do.”

Ms. Medrano went on to minor in environmental policy and graduate from Mason in May 2011. Her experiences in Front Royal helped her land a job as an executive coordinator at Conservation International, a non-profit organization in Lorton, Virginia.

As an educator with a passion for conservation, Dr. Aguirre says it is successes such as these that make his job worthwhile. “If we can help open one person’s eyes,” he exclaims, “then our program is working. We must teach people to work together to conserve the diversity of life on our planet. Our futures depend on it.”

Smithsonian-Mason Semester students investigate wood turtle populations in the field. Photo courtesy of Creative Services, GMU.
A Conversation on What it Means to be an Educated Virginian

By Beverly R. Covington

What is the role of liberal education in Virginia’s higher education landscape in light of the current statewide focus on increasing STEM programs and degrees? On June 13, “A Conversation on What It Means to Be an Educated Virginian” took place in Richmond’s Capitol Building. Sponsored by SCHEV and the Virginia Assessment Group (VAG), the conference brought together about 100 representatives from both public and private institutions in Virginia.

The conference kicked off with a welcome from Secretary of Education Laura Fornash, who expressed her enthusiasm for the conversation that would be taking place. She noted that it is the universities that will ensure that students are prepared for the fast-paced, ever-changing global economy. Bill Bosher, Distinguished Professor of Public Policy and Education at Virginia Commonwealth University and a member of the Governor’s Commission on Higher Education, spoke on “Virginia Education in Context.” He gave a history of the evolving issue of assessment and accountability within Virginia’s educational system. Among other highlights, he discussed his contributions to Virginia’s adoption of the Standards of Learning (SOLs). Underlying Dr. Bosher’s remarks was the perspective that the core conflict between liberal education values and the need to prepare students for the workforce is not new in the Commonwealth.

Debra Humphreys, the Vice President for Communications and Public Affairs for the Association of American Colleges and Universities (AAC&U), gave a presentation about Liberal Education Models. She outlined her organization’s Liberal Education and America’s Promise (LEAP) initiative, which is a national advocacy, campus action, and research initiative that champions the importance of a 21st century liberal education for individuals and for the nation. The initiative focuses on the development of 21st century skills that are in demand by employers. Dr. Humphreys pointed out that industries need more educated workers now because technology is taking over the jobs that require routine and manual skills. Thus, for the jobs that require a more in-depth and broad range of skills and knowledge, employers want more than just degreed workers; they want educated employees who are capable of complex communication, analysis, and writing. The LEAP initiative focuses on the following essential learning outcomes: 1) knowledge of human cultures and the physical and natural world, 2) intellectual and practical skills, 3) personal and social responsibility, and 4) integrative and applied learning. In addition to the Essential Learning Outcomes, LEAP promotes high impact curricular and pedagogical practices, authentic learning assessments, and inclusive excellence. Dr. Humphreys praised the Virginia Assessment Group, remarking that policymakers should look to VAG as a tool to assist in issues of accountability. Her presentation was followed by the comments of several VAG representatives regarding their participation in the LEAP initiative.

An important element of Virginia’s assessment efforts is the alignment of K-12 standards with college-level competencies. The progress of efforts in this area was presented by representatives from the Virginia Department of Education (VDOE) and the Virginia Community College System (VCCS). In the K-12 arena, Assistant Superintendents Linda Wallinger and Shelley Loving-Ryder of VDOE provided an update on the ongoing Virginia Career and College Readiness Initiative. It is designed to ensure that as many Virginia public high school graduates as possible have attained college-ready standards in reading, writing, and mathematics before entering postsecondary education. Vice Chancellor Susan Wood of the VCCS talked about the status of the Developmental Redesign Initiative. This effort seeks to support college readiness by reducing the need for remediation and increasing the number of students transferring and graduating. The VCCS continues to look for ways to build bridges with K-12 education and continued on page 5
incorporate promising practices for aligning curricula.

Following a networking lunch, attendees heard policy perspectives from leaders in the Virginia education community who served on the Governor’s Higher Education Commission. Mirta Martin, who is a member of the State Board for Community Colleges and Dean of the Virginia State University (VSU) business school, said that a Virginia community college education helps students cultivate curiosity, creativity, and a love of lifelong learning, preparing them to pursue a wide variety of bachelor’s degrees. Robert Lindgren, President of Randolph–Macon College, talked about how liberal arts education teaches students how to think and learn over a lifetime. Joann DiGennaro, President of the Center of Excellence in Education and a SCHEV Council member, gave her perspective on policy questions that demand greater attention in both K-12 and higher education, such as the importance of historical knowledge of one’s own culture.

The afternoon session featured small group discussions moderated by members of VAG. Each table considered questions such as “What are the characteristics of an educated Virginian?” and “To what extent is it the responsibility of colleges and universities in Virginia to address these characteristics?”. The responses reported out from each group included common themes involving the importance of developing a human being who can make sound life decisions, as opposed to just an employee. The groups agreed that an “educated Virginian” is one who can think critically and participate as an informed and engaged member of the community.

SCHEV staff and VAG will continue to examine the ideas exchanged in the “Conversation on What it Means to Be An Educated Virginian.” Results from the group discussions are being tabulated and will be used to inform future discussions among SCHEV, VAG, and the institutions about how best to continue and enhance the high quality of undergraduate education in Virginia.

Meet the new Council Secretary: Katharine M. Webb

During the July Council meeting, Council members appointed Katharine M. Webb of Glen Allen as Secretary. Ms. Webb is senior vice president of the Virginia Hospital & Healthcare Association (VHHA), a trade association of hospitals and health systems in Virginia, where she has been developing and advocating for health care policy issues for nearly 30 years. Among the issues she has championed are expansion of access to healthcare and quality improvement, transparency, higher education, responsible deregulation of health care, and a stable liability climate.

Ms. Webb also serves as executive vice president of the Virginia Hospital Research & Education Foundation (VHREF), the educational arm of VHHA, whose mission is to further the education of health professionals and to design and present educational programs to health care providers so that they may remain current on the major policy issues confronting the field.
For more than a decade, Virginia's Gaining Early Awareness and Readiness for Undergraduate Programs (GEAR UP) has been a model for how tutoring, mentoring, parental involvement, and other college-readiness initiatives guide students, especially those at risk of dropping out of school, toward postsecondary education.

GEAR UP has had a positive effect on many students who entered high school with deficits in reading and mathematics by focusing on activities that helped them catch up academically. Tutors and mentors employed with GEAR UP funds led many to achieve success in those academic disciplines. Campus visits also had a positive influence on how students perceived college. Many students visited campuses for the first time and had opportunities to talk with students and faculty about college and what that experience could mean for them. Other successful GEAR UP programs, including college scholarship and financial aid workshops for parents and students, contributed to positive attitudes about college.

Over the years, school administrators have reported achievement gains among GEAR UP students. More cohort members have taken advanced courses, including Advanced Placement and dual enrollment courses, than in previous years. Many schools reported a zero percent dropout rate among the GEAR UP cohort, a feat seldom experienced in Virginia schools.

Beyond academics, GEAR UP gave students an opportunity to be part of something special. Attendance improved, and social behavior, both at school and on GEAR UP-sponsored trips, was praised by school staff. GEAR UP also sent students to national events, including Virginia’s first representative to the youth forum in San Francisco sponsored by the National Council for Community and Education Partnerships (NCCEP).

Sadly, Virginia’s funding request to the United States Department of Education for a third GEAR UP program was denied. Fortunately, GEAR UP funds remain to help this year’s graduating students with financial aid.

As staff prepares to close the current grant, it is heartening that over the past ten years more than $38 million has been available for programs and scholarships through GEAR UP. In 2012, approximately $15 million will be awarded to about 600 scholarship and 400 grant recipients.

Virginia Bids Farewell to GEAR UP

By Gary Krapf

“Through GEAR UP’s influence, I have taken numerous college tours, participated in many learning activities, carefully planned my personal college experience, and dared to dream the unimaginable.”

- Student from Danville City Public Schools
In Memory: Tom Daley
November 4, 1953 - June 4, 2012

Tom Daley, SCHEV Deputy Director and longtime public servant, passed away at his home on Monday, June 4 while recovering from surgery.

Tom worked in Virginia higher education for over 30 years, serving as SCHEV’s Deputy Director and Chief Financial Officer since February 2005. In addition to serving as acting agency head in 2010, Tom had primary responsibility for analyzing the capital outlay needs of Virginia’s public colleges and universities. “His exacting analytical work was in a class by itself,” said SCHEV Director Peter Blake. “He cut no corners, wrote superbly and set a high standard of excellence and integrity for his friends and colleagues. We all learned a thing or two from Tom, not just about work but about life as well.”

Tom was well-known in Virginia higher education, serving over the years as Financial and Facilities Program Planning Manager for the Virginia Community College System, as Director of Budget and Finance at the University of Virginia’s Division of Continuing Education, as Director of Institutional Research at the College of William and Mary, and as Assistant Vice President for Planning and Evaluation, also at the College of William and Mary.

Tom earned a B.A. in International Relations from the University of Virginia and an M.B.A. with a concentration in Finance from Virginia Tech. He served as president of the Virginia Association for Management Analysis and Planning and was a member of the Virginia Executive Institute’s Class of 2006.

While his professional life was devoted to higher education, Tom’s personal life revolved around his family. Tom often shared photos and stories of family trips and his son’s white-water kayaking adventures. He and his wife, Betsey, recently celebrated their 30th wedding anniversary. Their son, Tom, is a student at the University of Virginia.

During a memorial service held on June 8, Tom’s colleague and good friend, Dan Hix said of him, “Tom was a devoted son, brother, husband, and father. More than a quarter century ago, I noticed something about Tom—and perhaps you did too. Each and every time he took a phone call from Betsey or Tom he would end it by saying, ‘I love you.’”

Tom’s leaves a legacy of professional and personal accomplishments that will not soon be forgotten.