The school plans to rapidly expand into accomplished graduate students in August, with the admission of a new crop of highly accomplished graduate students, which grew to 28 in the United States. The school opened degree-granting School of Sustainability to the first (and so far, only) freestanding, front and center at ASU, which is home to several centers and facilities devoted to the science of sustainability and a key player in the Decision Center for a Desert City and its world problems, is an example, as is the Decision Center for the Desert City and its accent on wise water management.

Decision Center for a Desert City and its world problems, is an example, as is the Decision Center for the Desert City and its accent on wise water management.

Going ‘green’: ASU gives sustainability mass roots

By Skip Derra

One convert at a time is a noble goal for any altruistic endeavor, especially sustainability, which has long laid low in the grass roots of society. Partly because of this, and because of the consumer-driven society in which we live, convincing people to sustain-ability has been slow.

Arizona State University's efforts in sus-tainability are garnering support on a level of hundreds at a time. Call it a "mass roots" effort that starts at the top with President Michael Crow pushing ASU forward in the field by making sustainability a university-wide priority. Crow also has played a visible role in advancing sustainability nationally. For example, he was intimately involved in formulating the recent American College and University President's Climate Commit-ment.

"More than ever, universities must take leadership roles to address the grand chal-lenges of the 21st century, and climate change is paramount amongst these," Crow has said about the President's Climate Commit-ment.

Sustainable tradition

ASU has a long tradition in sustain-ability, which has been the focal point of many environmental research projects and classes. Part of the interest in sustainability relates to ASU’s location in the Sonoran Desert of the Southwest. In recent years, research themes in sus-tainability were boosted by the opening of several centers and facilities devoted to the field. The Decision Theater, which fosters collaboration through visualization of real-world problems, is an example, as is the Decision Center for a Desert City and its accent on wise water management.

Sustainability education also has moved front and center at ASU, which is home to the first (and so far, only) freestanding, degree-granting School of Sustainability in the United States. The school opened its doors last January with an initial class of six graduate students, which grew to 28 with the admission of a new crop of highly accomplished graduate students in August. The school plans to rapidly expand into undergraduate education in fall 2008. After building the urban-environmental research portfolio of the Center for Environmental Studies and the Global Institute of Sus-tainability as director, Redman has turned his energies to designing the new School of Sustainability.

Bonny Bentzin
Manager, University Business Sustainability Practices

Bentzin leads and coordinates a university-wide network to integrate sustainability practices on campus, each ASU’s carbon neutrality goals, and use the campuses as a living laboratory.

Wellington “Duke” Reiter
Dean, College of Design

Reiter brings to ASU a vision for the “new city” – a blending of art, science, design and quality-of-life enhancement to achieve urban sustainability.

INSIDE

ASU makes the grade

ASU has nationally recognized as a campus sustainability leader.

S2-3

Paths to Sustainability

ASU is committed to environmental practices for a more sustainable university.

S4

Use-inspired research – Sustainability

S2-3

ASU sustainability efforts are picking up speed. With the recent opening of the School of Sustainability, continued research projects and ‘green’ business practices, ASU is committed to ushering environmental values into the social landscape.

Bonny Bentzin
Undergraduate Organizer

Green Summit

...living in a manner that I can be proud of – making choices that work for me without denying resources to others – now and in the future.

Brenda Shears
Associate Director
Global Institute of Sustainability

...trying to eat mostly food that I can recognize.

Rod Groff
Coordinator
Wrigley Lecture Series

Wrigley Lecture Series

Bonny Bentzin
Manager, University Business Sustainability Practices

Bentzin leads and coordinates a university-wide network to integrate sustainability practices on campus, each ASU’s carbon neutrality goals, and use the campuses as a living laboratory.

Wellington “Duke” Reiter
Dean, College of Design

Reiter brings to ASU a vision for the “new city” – a blending of art, science, design and quality-of-life enhancement to achieve urban sustainability.

Bonny Bentzin
Manager, University Business Sustainability Practices

Bentzin leads and coordinates a university-wide network to integrate sustainability practices on campus, each ASU’s carbon neutrality goals, and use the campuses as a living laboratory.

Wellington “Duke” Reiter
Dean, College of Design

Reiter brings to ASU a vision for the “new city” – a blending of art, science, design and quality-of-life enhancement to achieve urban sustainability.

Bonny Bentzin
Manager, University Business Sustainability Practices

Bentzin leads and coordinates a university-wide network to integrate sustainability practices on campus, each ASU’s carbon neutrality goals, and use the campuses as a living laboratory.

Wellington “Duke” Reiter
Dean, College of Design

Reiter brings to ASU a vision for the “new city” – a blending of art, science, design and quality-of-life enhancement to achieve urban sustainability.

Bonny Bentzin
Manager, University Business Sustainability Practices

Bentzin leads and coordinates a university-wide network to integrate sustainability practices on campus, each ASU’s carbon neutrality goals, and use the campuses as a living laboratory.
ASU is home to the nation’s first School of Sustainability. With unique graduate degrees and phased undergraduate degrees, the School of Sustainability will educate a new generation of leaders to address the environmental, economic and social challenges of the 21st century.

ASU’s Climate Commitment

ASU President Michael Crow is a charter signer and chair of the Stepping Committee for the American College & University Presidents Climate Commitment. Under Crow’s leadership, ASU will address global warming by implementing and modeling ways to neutralize greenhouse gas emissions on its campuses and accelerate research and academics to help the equitably re-institute the earth’s climate.

ASU Local Foods

ASU’s Grounds Maintenance has started a pilot program to direct food currently grown on campus out of the waste stream and into local kitchens. The ASU Local Foods Program is being expanded to incorporate the work and passion of our students. In a paired waste-management project, Grounds Maintenance is diverting landscape waste to a local farm for composting. The compost is then returned to campus, where it is used in the place of industrial fertilizers. This program, directing an ounce of 21st century results from the waste stream, doesn’t just save money—it creates a healthier campus with the use of matures fertilizers.

School of Sustainability

Students chose with their forks that will help to create a more ‘green’ friendly world.

Investments in the Global Institute of Sustainability

A $25 million dollar investment from Julie Ann Wrigley transformed the Center for Environment Studies, with its growing portfolio of urban environmental research, into a Global Institute that connects all of ASU’s sustainable activities in research, education and business practice.

Joint Center on Urban Sustainability

In May 2006, ASU established the Joint Center on Urban Sustainability (JCUS) with the Chinese Academy of Sciences. JCUS is the only high-level partnership between the United States and China to address the complex problems of urbanization in the context of environmental, economic and social sustainability from the perspectives of both countries.

Faces of Sustainability

The pervious parking lot is a project of the Student Sustainability Coalition. Nancy Grimm

The Student Sustainability Coalition is a venue for student organizations and individuals concerned with sustainability to meet and work together to exchange resources and opportunities that contribute to sustainability efforts on the ASU campus and in the surrounding community. The coalition's objectives include reducing ASU's ecological footprint and raising awareness.

Pervious Parking Lots

The parking lot outside of ASU's Nelson Fine Arts Center is covered in pervious pavement. Unlike conventional asphalt and concrete pavement, pervious pavement allows liquid and air to flow through it, passing directly into the earth’s crust. The pervious pavement uses no paint, exchanges groundwater aquifers and manages the urban heat island effect—a phenomenon that occurs when urban materials such as conventional pavement and buildings absorb and radiate heat, thereby diminishing the air pressure of the area around them. Additionally, pervious pavement facilitates improved receptor health because rainwater comes to the surface that flows through the pervious.

The parking lot is a project of the National Center for Excellence in Sustainable Urbanization and Energy (SUSTAIN), a joint project of the National Science Foundation and the National Aeronautics and Space Administration.

The Decision Theater is used to explore sustainability issues ranging from urban growth and public health to education and the environment.

Pat Gober

Pat Gober, co-director of the Decision Theater for a Desert City project, says, "The Decision Theater is a space to collaborate to develop solutions for a sustainable desert city.

Joint Center on Urban Sustainability

In May 2006, ASU established the Joint Center on Urban Sustainability (JCUS) with the Chinese Academy of Sciences. JCUS is the only high-level partnership between the United States and China to address the complex problems of urbanization in the context of environmental, economic and social sustainability from the perspectives of both countries.

Joint Center on Urban Sustainability

In May 2006, ASU established the Joint Center on Urban Sustainability (JCUS) with the Chinese Academy of Sciences. JCUS is the only high-level partnership between the United States and China to address the complex problems of urbanization in the context of environmental, economic and social sustainability from the perspectives of both countries.

Joint Center on Urban Sustainability

In May 2006, ASU established the Joint Center on Urban Sustainability (JCUS) with the Chinese Academy of Sciences. JCUS is the only high-level partnership between the United States and China to address the complex problems of urbanization in the context of environmental, economic and social sustainability from the perspectives of both countries.

Joint Center on Urban Sustainability

In May 2006, ASU established the Joint Center on Urban Sustainability (JCUS) with the Chinese Academy of Sciences. JCUS is the only high-level partnership between the United States and China to address the complex problems of urbanization in the context of environmental, economic and social sustainability from the perspectives of both countries.

Joint Center on Urban Sustainability

In May 2006, ASU established the Joint Center on Urban Sustainability (JCUS) with the Chinese Academy of Sciences. JCUS is the only high-level partnership between the United States and China to address the complex problems of urbanization in the context of environmental, economic and social sustainability from the perspectives of both countries.

Joint Center on Urban Sustainability

In May 2006, ASU established the Joint Center on Urban Sustainability (JCUS) with the Chinese Academy of Sciences. JCUS is the only high-level partnership between the United States and China to address the complex problems of urbanization in the context of environmental, economic and social sustainability from the perspectives of both countries.
Sustainability reaches new heights with education, training

(Continued from page 51)

• A flexor program where cars, located on campus, can be rented by the hour as a way of encouraging alternative methods of commuting.

• A green purchasing program that encourages buying “green,” purchasing recycled products, and an EnergyStar purchasing mandate in place since 1996.

• A commitment to solar energy. The first system on campus was a 30 kW/hr demonstration system on the roof of a parking garage, providing shade for cars and power for the garage. A second system is being installed on Bioscience B that will serve as a prototype for a 4 MW system on the Tempe and Polytechnic campuses.

• A food utilization program that uses food grown on campus – fruits (including 20 citrus varieties), dates, nuts and much more – in ASU’s dining facilities. Additional varieties will be introduced as areas of the campus are re-landscaped turning the urban landscapes of ASU into a microfarm.

• A program that diverts landscaping waste to a local farmer partner for composting. In its first month, 11 tons of landscaping waste was used to create compost for a 5 acre farm in Tempe and Polytechnic campuses.

ASU makes the grade in sustainability

By Skip Derra

Arizona State University is making progress up the chart of sustainability. Two recent reports on sustainability on campus feature the efforts of the university.

ASU earned high marks in its on-campus sustainability efforts, including on administrative change and energy, and green building, according to the College Sustainability Report Card 2008. The Report Card is published by the Sustainable Endowments Institute in Cambridge, Mass., and assesses the sustainability efforts of 200 public and private universities with the largest endowments. It is the only independent sustainability evaluation of campuses’ endowments and endowment investments. Each university is judged according to eight areas: administrative change and energy, food and recycling, green building, transportation, endowment transparency, investment priorities and shareholder engagement.

ASU has made progress in each of these areas, and overall, the school scored a B in food and recycling and transportation. ASU was listed as a “campus sustainability leader” making it one of only 25 universities to earn that distinction, because it scored at least an average of an A- in all five campus categories. Its overall grade for all eight categories was a B.

The Report Card listed ASU’s administrative efforts because of the key role President Michael Crow has played in the President’s Climate Commitment and because of the stature of sustainability efforts on campus. Climate change and energy efforts were cited, in part, because of ASU’s policies concerning energy use and its plans for new solar energy installations. The green building program was cited because all new ASU buildings meet at least LEED Silver standards.

“We are quite pleased that the Sustainability Endowments Institute has recognized ASU’s leadership during their first assessment of our performance,” says Jonathan Fink, director of the Global Institute of Sustainability and ASU’s sustainability officer. “We expect that we will do even better in the next round, reflecting programs that are just now being implemented.”

Schools that received the highest overall grades (6 A’s) were Harvard University, Dartmouth College, University of Washington, Middlebury College, Carnegie Mellon and University of Vermont.

“Kiwi magazine, a publication devoted to “helping parents raise their children the healthiest way possible,” also put out a green college report that lists ASU as one of the 50 schools that “will help your kids help the planet.”

In its 2007 Green College Report, Kiwi cited the efforts of ASU’s School of Sustainability to establish an undergraduate degree in sustainability with a focus on problem-solving learning. The school’s two-year energy saving upgrade project, and its solar array installation on the roof of a parking structure as examples of how it is going green.

Derra, with Media Relations, can be reached at (480) 965-4825 or skip.derra@asu.edu.

School of Sustainability director Charles Redman holds up a slab of porous concrete with sustainability students Thad Miller (left) and Tisch Muñoz-Erickson on the previous parking lot.

These projects include large programs in rapid urbanization, like the Central Arizona-Phoenix Long-Term Ecological Research Project, the Decision Center for a Desert City, and other activities like the ecological restoration of the Mongolian grasslands in China, the development of new architectural approaches to solar energy, the integration of geospatial analysis into the assessment of urban crime data and a study of the social factors influencing the effectiveness of biodiversity preservation.

Fink says overall the Global Institute of Sustainability (GIOS) has generated $35 million in private investment and has an international board of trustees co-chaired by businesswoman Julie Ann Wiegley, Rob Walton (chairman of Wal Mart) and President Crow.

“The world is rapidly recognizing that conducting business as usual poses potentially great dangers for future generations,” he explains. “ASU, with its ability to quickly must large teams with different disciplinary backgrounds is well positioned to address some of the toughest technical and consumer product questions of sustainability.”

In fact, the multidisciplinary culture at ASU has helped its overall sustainability efforts, Fink says.

“We work with government agencies to make sure the problems we are working on are the ones that actually will have an impact,” he says. “This is something that will grow in importance because as the problems grow more complicated we will need insight from economists, historians, artists, as well as scientists and engineers. So what stands out at ASU is a culture in which working as a team is part of our distinctive competitive edge.”

For students, it could mean being positioned properly for the future.

“If you want this done at all levels,” Redman says. “We believe there is an enormous market for people trained in sustainability,” he adds. “Beyond business where we believe the majority of students will end up, there will be positions in government, especially at local and state levels, in NGOs and in academia.”

“The payback is we are going to generate human capital, trained personnel in sustainability,” Redman says. “The key to this is an educated work force, but it is a work force educated for this century and not the 19th century.”

Derra, with Media Relations, can be reached at (480) 965-4825 or skip.derra@asu.edu.

Fellows Kim Stuhlmiller and Jonathan Fink discuss the bike share program.

Facies of Sustainability

V. Scott Cole

Department of Life Sciences

Jianguo Wu

Jianguo Wu is a fellow in the Global Institute of Sustainability.

V. Scott Cole

Deputy Executive Vice President, Business & Finance

Cole has been the primary implementer of ASU’s move toward sustainable construction practices, assuming all that his new building is LEED certified. He has also helped guide the facilities and maintenance staff toward more active engagement in ASU’s sustainable business practices.

Rick Shangraw

Vice President for Research and Economic Affairs

In his role as executive director of the Decision Theater, Shangraw helped develop this facility into one of ASU’s strongest tools for advancing sustainability, building bridges between the university’s research strengths and the policy needs of the community.

Jay Golden and Kamil Kaloush

Co-Directors, National Center of Excellence for SMART Innovations for Urban Climate and Energy

These engineers are teaming with industry, international researchers and governmental agencies to develop sustainable materials and renewable technologies for an urbanizing world.

Jay Golden

Kamil Kaloush

Kamil Kaloush