

#### 2010-2011 Annual Report



# **Department Mission & Vision**

Landscape & Natural Resources enriches the community by creating and maintaining an inviting and sustainable outdoor environment, providing high quality service for operational activities, and generating research and educational initiatives that guide conservation and stewardship of natural resources. We support the mission of UCF through a comprehensive outdoor laboratory that creates opportunities for relevant, experience-based learning, urban ecology research, and human connection with ecosystems and landscapes. Our inclusive program supports regional, state, national and global efforts to develop sustainable urban environments.

Our program will expand UCF's vision by representing new kinds of partnerships that bridge the educational, research and operational goals of the University. These meaningful partnerships will create inclusive interdisciplinary strategies that will be a model of sustainability for the campus and community.

#### **Contribution to UCF Goals**

## Offer the best undergraduate education in Florida

Landscape & Natural Resources (LNR) hosted seven undergraduate internships in the spring semester and continues to teach a service-learning course in the fall semester. The course provides opportunities

for experience-based learning, urban ecology research, and enhancing the campus outdoor environment. It is jointly supported by UCF Biology and Liberal Studies departments.

Our program treats the campus as a living outdoor laboratory that creates opportunities for research and educational initiatives that guide conservation and stewardship of natural resources. Eight (8) research projects used the natural lands for classes in Biology, Ecology, Engineering, and Anthropology. These research projects impacted a total of 1,450 students.



#### Become more inclusive and diverse

LNR supports a diverse work force, including students and full time staff. The Department also encourages employees to participate in "English as a Second Language" courses, as well as diversity training. The LNR land manager participated in the Leadership Enhancement Program this year, which provided leadership development opportunities to gain career enhancing skills and leadership experiences in today's changing educational environment. Additionally, LNR established meetings with all team members so that each employee would have an opportunity to contribute to the growth and development of the department. The Department continued to provide opportunities for minority owned businesses

## Be America's leading partnership university

LNR expands UCF's vision by representing new kinds of partnerships that bridge the educational, research and operational goals of the University. These meaningful partnerships create inclusive interdisciplinary strategies that are a model of sustainability for the campus and community. Specifically, LNR has sustained approximately ten partnerships with outside federal, state, and non-governmental organizations including St. Johns River Water Management District, Florida Division of Forestry, Seminole and Orange Counties, and The Nature Conservancy. Additionally, a new partnership with the Arbor Day Foundation was created this year through the campus' Tree Campus USA designation, establishing a connection to a renowned national agency and strengthening ties with regional leaders in urban forestry and natural resource management.

#### **Other Accomplishments**

### Grants and Awards

LNR received two grants totaling \$64,819. Florida Fish and Wildlife Conservation Commission (FWCC) awarded UCF \$45,959 to treat upland invasive plant species in the campus natural lands. Additionally, the university was awarded \$18,860 from the Florida Division of Forestry, through the Department of Agriculture and Consumer Services, as part of the 2010-11 American Recovery and Reinvestment Act (ARRA) to prune 111 young native hardwood trees



inside the campus core, and plant 50 Florida native trees around two campus retention ponds.

Through LNR, UCF was recognized as a Tree Campus USA in April 2011 by the Arbor Day Foundation. The Department applied and was awarded this prestigious recognition, which further promotes the university's commitment to its urban

ecosystem health. The trees on the UCF campus improve air quality, promote energy conservation, slow stormwater runoff, and take up atmospheric carbon dioxide. In addition, increasing the campus tree canopy is an important component of the University's Sustainability Plan and Climate Action Commitment.

#### Cost Effectiveness

LNR continues to maintain and enhance over 300 acres of landscaped area and 800 acres of natural lands and retention ponds. Although significant budget cuts over the past several years have reduced the number of employees, LNR continues to be a vibrant department, and we supplement operational budgets through partnerships, grants and service contracts to provide a high level of service to the campus community. Additionally, we have reduced maintenance costs through implementation of Florida-friendly landscaping concepts that reduce water usage and improve plant success on campus.

# **Technology**

LNR installed monitoring stations across campus to monitor the urban heat island effect. The results of this study will contribute to best management practices that increase campus sustainability initiatives. Additionally, staff and interns were trained to use real-time geographic information systems (GIS) to capture campus data, including locations of storm water infrastructure, state listed species, and landscape features.

#### Employee Achievements and Awards

LNR attended and presented at the Association for the Advancement of Sustainability in Higher Education (AASHE) annual meeting, and attended the Florida Native Plant Society conference. Additionally, we received Tree Campus USA designation in April 2011 by the Arbor Day Foundation.

LNR has an established training program to teach applied land management skills to staff, faculty, and students. Through this initiative, LNR trained four (4) employees, two (2) faculty, and fifteen (15) graduate students to be certified type II firefighters (wildland firefighters), and

hosted nine (9) internships in the spring and fall semesters. These internships are offered in partnership with the Biology and History Departments.

#### **Department Highlights**

In support of the President's commitment to be carbon-neutral, LNR has embraced Florida-friendly landscaping concepts on campus. In addition to the 50 tree plantings made possible by the Recovery Act grant (see "Grants and Awards" below), LNR installed



600 native young trees and shrubs around campus retention ponds in 2011 to further enhance these important stormwater features. The additional planting project was designed and implemented with help from students involved in a senior level, service-learning based course taught at the University.

Other department activities included: completion of a department strategic plan; creation of a compliance database that tracks permits and regulatory documentation; completion of 75-acres of mowing to reduce wildfire threat and increase habitat quality; completion of a campus wayfinding design; and reduction of potable water usage by transitioning irrigation to reclaimed water.



The Department oversaw the design and implementation of new landscape construction projects on campus this past year, including: the Partnership III building, the new Police Station, Rec and Wellness Expansion, Career Services and Experiential Learning, Physical Sciences building, Parking Garage H, Morgridge Reading Center, and Lake Claire recreation area. The projects, such as the landscapes at Parking Garage H and Lake Claire, built on existing landscape themes which emphasized native plant materials to create

visually appealing landscapes that will require lower maintenance and fewer inputs of water and chemicals.

In addition to these new construction projects, LNR implemented several key campus enhancements this year. New plantings of live oaks north of Ferrell Commons and the Live Oak Room will greatly enhance the tree canopy in that area of campus. Additionally, LNR recently replaced all of the sod on the north section of Memory Mall to improve this major focal point for campus gathering and events. We also began planning for tree planting along Memory Mall

to expand the campus tree canopy and provide badly needed shade to the walkways of this heavily travelled area of campus.

The Department also started several major infrastructure projects this year to improve the campus environment. Sidewalks were expanded in key areas of campus where worn paths had created permanent dirt trails with erosion problems. We began a project to install new reclaimed water pumps and started expanding the reclaimed water system to the campus core. The projects will nearly complete our conversion from the use of potable water to reclaimed water throughout campus, greatly improving our sustainable use of water resources.

#### Assessment Data

Through completion of a department strategic plan, LNR has become more focused on planning and implementing planned goals and objectives. For additional information, see attached strategic plan, assessment plan and results.

