

Design and Management of Colorado Landscapes

Goal: Colorado State University will enhance its focus and depth in undergraduate education, graduate education, research, and outreach in design and management of Colorado landscapes, serve as the primary provider of new management talent for Colorado's green industry, be recognized as the primary source of knowledge for Colorado's landscape industries, and be recognized nationally for graduate education and research in green industry crop evaluation and limited-water landscape plant cultivation. This will include continuation of the nationally recognized BS degree in landscape architecture and BS degree in landscape horticulture, graduate education and research in plant selection and improvement, limited-irrigation landscape plant cultivation, and landscape policies, and outreach in landscape industry plant selection, cultivation management, and Master Gardener education and volunteer development.

Purpose: Colorado is an urban and urbanizing state in which demographic evolution is changing the scope of "agriculture." The landscape (green) industry of Colorado, and the nation, is large and growing and comprises a significant part of Colorado agriculture (the green industries have been recognized as "agriculture" by the Colorado General Assembly). The industry includes production, wholesale, and retail sales for floriculture, nursery, and tree crops, garden supplies, irrigation equipment, outdoor equipment, and development and care services for landscapes, such as golf courses, landscape design and construction, and landscape maintenance for homes, businesses, and public gardens and cemeteries. Colorado expenditures on garden-related products, landscape and lawn service, and other related green industries (irrigation, botanical gardens, and outdoor equipment) have averaged 10 percent annual growth since 1993, resulting in \$1.67 billion in direct sales, in 2002. (This generates an economic impact of \$2.1 to \$5.0 billion depending on the economic multiplier used.) The value of the Colorado golf industry alone is \$1.2 billion. The landscape-related industries of Colorado employ nearly 34,000 positions (6 percent average annual growth) with a payroll of \$825 million annually (18 percent average annual growth). Thirty percent of industry revenues are generated from out of state (domestic and international) sales. Appropriate design and management of the landscape, especially in the environmentally sensitive regions that typify subdivisions and development of ranch lands, are essential for the quality of life in Colorado and for economic development related to tourism, industry location, retention of home valuation, and the green industry itself. Community landscaping strongly influences the physical/biological environment and mitigates many aspects of urban development by moderating climate, conserving energy, using carbon dioxide, improving air quality, controlling rainfall runoff and flooding, lowering noise levels, preserving green spaces, harboring wildlife, and enhancing the attractiveness of cities.

The Department of Horticulture and Landscape Architecture offers the B.S. in Landscape Architecture (194 majors in Fall 2008-09) and the B. S. in Landscape Horticulture (113 majors in Fall 2008-09). These degree programs have excellent support from industry. Colorado State University is in a strong position to assist with the economic development of Colorado's green industry and to enhance the well-being of tourists and citizens by educating green industry professionals, researching commercial and residential issues related to ornamental plantings and landscape restoration, and providing continuing education to industry employees and citizens on best practices for plant selection, plant production and maintenance, water conservation and irrigation, pest control, and landscape design.

Strategic Actions:

- Establish a Center for Design and Management of Sustainable Landscapes with faculty and county agent working groups to maintain cohesion of teaching, research, and outreach efforts, build professional expertise, and strengthen relationships with the industry.
- Establish a concentration in golf business management.
- Grow the B.S. in Landscape Horticulture student enrollment by double the rate of Colorado population growth, or 3 percent per year.
- Implement the proposal to establish a Master of Landscape Architecture degree.
- Prepare a facilities program plan to address the need for field, greenhouse and laboratory space for Landscape Horticulture.
- Pursue the idea of campus becoming a certified member of the Audubon Cooperative Sanctuary Program/Audubon Classic Program/Audubon Sustainable Community Program. Work with students and faculty in WCNR and Facilities Services to develop a Natural Resource Management Plan.

Critical Resource Growth Needs:

- Add positions in Landscape Architecture and Landscape Management, critical resources associated with the high student: faculty ratio that threatens national accreditation of the LA at CSU, and thus the viability of the degree program.
- Add GTAs to support laboratory instruction, and the expanded enrollment in HCC100.

- Secure funds for renovation and development of the Shepardson Building (\$18 million) and the Plant and Environmental Research Center (PERC) (\$8 million).
- Secure funding to pursue Audubon certification program.

Personnel:

Administrative Advisor: Steve Wallner

Steering Committee Chair: [Tony Koski](#)

Steering Committee Members: Joe McGrane, Zach Johnson, Patrick Martin, David Whiting, Jennifer Bousseout, Irene Shonle, Bill Bauerle