Colorado State University Cooperative Extension programs are helping Coloradans

- enhance investments in gardens, yards and landscapes through research-based information and best management practices;
- increase knowledge and skills related to the challenges of gardening in arid and semi-arid environments.

**The Costs...**

- Demand for urban water is becoming a critical issue in the arid West. It is estimated that 35% to 60% of the water used in western U.S. metropolitan areas during the summer is applied to landscaped areas, including lawns. Landscape plant selection, and irrigation system design, maintenance and management techniques are key factors in determining water usage.
- According to data from the Plant Health Care Industry, more than 90% of the pesticides typically applied in landscape maintenance are unwarranted and have little to no benefit. Homeowners who strive for the perfect lawn have been accused of using four to six times more chemicals per acre than farmers do, and may use twice as much water as turf needs to survive. Excessive or careless fertilizer or pesticide applications contribute to water-quality problems.
- Replacing sod lost to poor management or drought costs an average of $1-$1.50 per square foot, or $1,500 for a 1,000-square-foot lawn; replacing sod consumes more water than maintaining the current landscape.

**Enhancing Landscape Investments Through the Master Gardener℠ Program**

Gardening is one of the most popular hobbies in America. According to the National Gardening Association, each year homeowners spend almost $40 billion taking care of their yards and gardens. Landscapes, gardens, parks and green spaces provide economic, environmental and social benefits. In Colorado, maintaining trees, shrubs, lawns and flowers helps the environment, increases property values and generates $2.2 billion to the state’s economy. Since its beginning in 1975, the Colorado State University Cooperative Extension Master Gardener℠ Program has responded to increasing demands from the gardening public for trustworthy, science-based information. Each year advanced and novice Master Gardeners take part in training provided by professional horticulture staff. Once trained, they “give back” hours and expertise expanding the capabilities of Extension staff to answer consumer horticultural questions and multiplying Cooperative Extension’s ability to reach a greater number of clientele. Their volunteer efforts include staffing information desks at Extension offices, Farmers’ Markets, county fairs, nurseries, clinic sites and garden shows; making field visits and public presentations, answering telephone calls, and writing for mass media and newsletters. Master Gardeners also serve as catalysts to encourage community gardening activities. They coordinate and participate in school and service projects; horticultural therapy programs through prisons, hospitals, senior and disability centers; and career-development efforts through schools, prisons, detention centers and youth programs. Cooperative Extension’s use of trained knowledgeable talent in a volunteer network enhances Coloradans’ quality of life by extending knowledge-based education throughout Colorado communities to foster successful gardening, enhance environments, and strengthen green industry partnerships.
In addition to being a popular hobby, gardening can add dollars to the value of a home. Two university studies found that homebuyers value a landscaped home up to 11.3% higher than its base price. Another survey showed that landscaped curb-appearance raised a home’s value by 4.4% and a landscaped patio by 12.4%.

Research by USDA found that a large front-yard tree increased the sales price of residential property by 1% or about $25 each year annualized over a 40-year period. A large tree on public property pays back taxpayers nearly $60 per year in environmental benefits. (Clemson University, University of Michigan, 2002; USDA Forest Service, 1999)

Colorado green industry leaders readily recognize that Cooperative Extension Master Gardeners directly impact the success of local gardeners. This in turn supports the success and growth of the Colorado Green Industry whose wholesale value of goods and services exceeds $2 billion annually – accounting for over one-fourth of the state’s agriculture industry. The Green Industry employs more than 36,000 people with an annual payroll in excess of $450 million. This sector is one part of the economy that reaps the benefits of Colorado’s population growth from homeowners with abundant disposable income. The average household in Colorado spends from $200-$600 annually on yard care and gardening supplies. (Colorado Department of Agriculture, 2003)

Colorado State University Cooperative Extension makes a major yearly investment in basic training for Master Gardeners. Attention focuses on retaining skilled Master Gardeners by increasing volunteer options and educational opportunities. Quality training allows volunteers to expand community outcomes and proactively address environmental issues such as water and energy conservation, alternative pest management, waste management and chemical reduction. An evaluation of the recently upgraded hands-on curriculum showed that it put Master Gardeners onto a fast track for critical thinking skills and diagnostic abilities. Last year, 1,700 Colorado Master Gardeners supported Cooperative Extension horticulture programs in 34 counties by providing 72,000 hours of volunteer time worth more than $1,000,000.

Pueblo County Master Gardeners answered more than 1,300 calls on garden and landscape management during last year’s growing season. They also answered questions from a large percentage of the 12,000 people who frequented the local Farmers’ Market. Through a recent clientele survey requesting feedback on the Master Gardeners’ perceived knowledge, ability to make recommendations and value of program, responses indicated that 90% planned to follow the recommendations provided by Master Gardeners and 100% agreed that the program services were valuable. The survey indicated a value of each educational assistance at approximately $76 per client making the total value of all telephone and field calls approximately $100,000 to Pueblo County clientele.

For the past 10 years, the Boulder County Jail’s one-acre garden has provided inmates an opportunity for community service. Master Gardeners and other volunteers spend countless hours planning, networking, gathering resources and working in the garden. They share a common labor experience – and a problem-solving environment – with the inmates. In addition to the dividends reaped in human development for volunteers and inmates alike, the thriving garden produces between 12,000-19,000 pounds of produce each year, which translates to about a $7,000 annual savings for the Jail’s food budget.

Community gardens blend combine healthy behavior with the ability to share produce with neighbors, senior centers and shelters. Denver County’s team of Master Gardeners participate in the national “Plant A Row for the Hungry” Program, which involves gardeners in community hunger issues and allows them to share the harvest. Each year plans are made to grow more produce to donate to Denver food banks. In nearby Boulder County, Master Gardeners and other volunteers donated 3,017 pounds of fruits and vegetables from the Jubilee Garden to Community Food Share of Boulder County.