BRIEF STATEMENT OF PROGRAM/PRACTICE

UC Davis has taken to heart the old saying, "When life gives you lemons, make lemonade." The campus took a landscape nuisance and transformed it into a successful olive oil program.

For years, oily fruit that dropped from the university's 1,500 olive trees had created hazardous conditions on bicycle paths. Lawsuits from bicycle accidents cost the university an estimated \$59,402 in claims and legal fees in 2004 alone.

Weary of the hazards and the high costs of tree maintenance, the Buildings and Grounds Division decided in 2005 to take a more sustainable approach. The division began harvesting the olives and producing olive oil.

UC Davis Olive Oil has become a roaring success. The program reduced tree-maintenance costs, eliminated liability claims, decreased the use of chemicals and burnished the university's reputation.

The program has been embraced throughout the university community, linking our landscape maintenance staff to farm advisors, academics, administrators, students, alumni and industry. University officials tout the program at commencement ceremonies and student orientations as an example of UC innovation.

UC Davis Olive Oil serves as a model for sustainability and entrepreneurship that other public agencies can apply to their own landscape resources. Take lemons, make lemonade.

INSTITUTIONAL BENEFITS

Olive oil not only has health benefits, it has institutional benefits. The impact of the olive oil program on UC Davis includes the following:

- Increased safety. Harvesting olives from trees that hang over major bicycle routes has removed a hazard to cyclists and pedestrians. Reports of bicycle accidents to Buildings and Grounds Division have been reduced to zero since the olive oil program began.
- **Reduced costs.** UC Davis Olive Oil has driven down the net cost of managing olive trees by an estimated 66 percent. A large part of the decrease is due to the elimination of liability claims, which cost the university an estimated \$59,402 in 2004. Labor costs have been reduced by an estimated \$8,000 per year because farm-labor crews have replaced more expensive landscape-maintenance crews. The university no longer sprays the trees to prevent them from flowering, which saves an additional \$24,000 per year. Revenues of \$46,402 from olive oil sales have further boosted the bottom line.
- Improved tree maintenance. The campus olive trees had not been pruned in decades, leading to the spread of olive pests and disease. Overgrown scaffold limbs regularly would break during poor weather, creating an additional threat to the trees' long-term health. With the new emphasis on improving olive yield, the division has begun a multi-year effort to prune the trees to industry standards. By eliminating diseased wood and reducing the threat of limb breakage, our pruning efforts are improving landscape assets that are much-loved in the community.
- Integrated landscape maintenance with the university's academic mission. The olive oil program has, for the first time, connected landscape maintenance to the university's academic mission. Buildings and Grounds Division now consults with university farm advisors in the maintenance of olive trees, engages university experts in the blending and sensory evaluation of the oils and works with the Food Science department on developing an academic program focused on olives and olive oil.
- Enhanced university image. UC Davis Olive Oil has become a goodwill ambassador for the university and has enhanced the university's prestige. All three 2006 olive oils were awarded gold medals at the largest olive oil competition in North America, with one oil receiving a Best of Class recognition. University officials have distributed the oil to guests and dignitaries. University officials tout the program at commencement ceremonies and student orientations as an example of how UC Davis stands out from the pack.

The institutional benefits of olive oil have boosted the health of UC Davis and allowed the campus to stand out as an innovator.

CHARACTERISTICS OR QUALITIES THAT MAKE THIS PROGRAM OR PRACTICE DIFFERENT OR INNOVATIVE

The UC Davis Olive Oil program deserves recognition for a number of innovative features:

• Changing a liability into an asset. For years physical plant managers at UC Davis paid the high costs of maintaining the olive trees. The trees dropped fruit for five months of the year, which led to bicycle accidents, frequent lawsuits and constant clean-up. Removing the trees was not an option, because they were old and cherished features of the landscape that were valued by the environmentally sensitive campus community.

By recognizing that the trees had agricultural value as well as ornamental value, UC Davis Olive Oil has transformed a former liability into a revenue-generating asset. Most olives are now harvested before they drop on the bike paths, reducing the costs of spraying, sweeping and lawsuits. Sales of the oil provide revenues that further offset the costs of maintenance.

- **Promoting sustainability.** When the olive trees were treated like a landscape nuisance, the university spent approximately \$24,000 per year on chemicals to discourage fruit set. We have eliminated that expense because we want the trees to be productive. In addition, we send any green waste arising from the harvest to the campus mulching facility, ultimately reusing the green waste in flower and shrub beds. The practice of harvesting the olives is more consistent with the university's agricultural focus than the previous practices of sweeping and dumping the fruit.
- Promoting entrepreneurship. Entrepreneurship has pitfalls for public
 institutions that can lead to potentially embarrassing results. Buildings and
 Grounds Division determined early on that the olive oil program would need to
 avoid competing with the private sector or diverting staff from their primary
 duties.

To avoid competition with the private sector, Buildings and Grounds Division decided that UC Davis Olive Oil would be sold only at the campus bookstore. The oil augments the bookstore's other university-branded merchandise such as sweatshirts and caps. The bookstore also handles sales and shipping, so these time-consuming tasks do not divert division staff from their primary mission.

These innovative features help UC Davis Olive Oil stand out, but the program model can be emulated by other institutions.

HOW THIS PRACTICE CAN BE USED BY OTHERS

The success of UC Davis Olive Oil offers a model for any institution that maintains a landscape. An institution need not have olive trees – Buildings and Grounds Division also transforms its green waste into mulch that is then reapplied to the campus landscape, saving the costs of waste disposal and of purchased mulch. The division also has sold walnut burls to an exotic wood dealer when the division removed several hazardous walnut trees.

The UC Davis model includes three parts: identify assets, evaluate cost-effectiveness and minimize pitfalls.

- **Identify assets.** Landscapes often have assets with marketable value. Those assets may be wood from trees scheduled for removal, green waste, or tree nuts and fruits. Institutions should assess their unique landscapes to identify assets that may have value.
- Evaluate cost-effectiveness. After identifying a potential asset, the institution needs to determine whether the value of that asset can be extracted cost-effectively. Buildings and Grounds Division commissioned a quick feasibility study prior to producing its first batch of olive oil. The study examined the steps necessary to produce olive oil and estimated the costs of each step. Based on this information, the division decided that the costs of olive oil production likely would not exceed existing maintenance costs, while having the benefit of reducing liability costs.
- Minimize pitfalls. Once an institution has identified an asset and has determined that the asset's value can be extracted cost-effectively, the institution needs to consult with interested parties to hear complaints or objections. Division staff vetted the olive oil proposal with top university administrators and figures within the olive oil industry. These conversations underscored the importance of not diverting staff from their primary duties and not competing with private olive oil producers.

All three of these elements helped the Buildings and Grounds Division assess how to move forward with the initial idea to make olive oil. The commitment of management and staff helped make the program a success.

DEMONSTRATION OF MANAGEMENT INVOLVEMENT AND EMPLOYEE COMMITMENT

Staff involvement at all levels of the university has contributed to the success of UC Davis Olive Oil. The program engages everyone from groundskeepers to the chancellor.

• Involvement of the Buildings and Grounds Division. The director conceived of the program when he visited the scene of a bicycle accident. The director looked at the fallen cyclist, saw the smashed olive fruit and was struck by the familiar scent of olive oil. With these memories fresh in mind, the director then contracted for the feasibility study, vetted the proposal, developed marketing opportunities, coordinated harvest labor and oversaw all elements of first-year production. The director has continued to provide energetic oversight of the program even with the subsequent hiring of a project manager.

The harvest season requires the assistance of division personnel such as tree trimmers who chip tree limbs, recycling staff who remove green waste and equipment operators who run the tractor-mounted tree shaker. The program manager consults with landscape and grounds superintendents who dispatch personnel as needed.

The division's communications experts design labels and marketing materials. Once the oil is bottled, available division personnel pitch in to unload cases from the truck and staff occasional tasting events. During slow periods, available staff will fill wooden gift boxes that are sold at the bookstore or presented by university officials to visiting dignitaries. Although the olive oil program is not part of the usual work routine, employees take pride in the effort and look forward to enjoying the oil themselves.

• Other university involvement. Employee involvement in the olive oil program also goes beyond the Buildings and Grounds Division. University staff assists the division in developing the olive oil blends that will be offered for sale, and have used the oil in sensory evaluation courses. Employees at the Alumni Association have promoted the oil to enthusiastic response from their membership. The campus bookstore staff has worked hard to promote and sell the oil to students, staff, faculty and visitors.

Campus officials have used the oil as a goodwill ambassador for the university, providing bottles to visiting dignitaries and on a university trip to China. The chancellor has become so fond of the oil that he has called upon concessionaires to have the oil available in dining commons and at university functions.

UC Davis Olive Oil has become a badge of pride for university employees in just a short period. As the next section shows, the program also has documented the achievement of several goals.

DOCUMENTATION OF RESULTS, ANALYSIS, CUSTOMER FEEDBACK, AND RESULTING BENCHMARKS

The goals of the olive oil program were to "address the problems of current management practices, provide a source of revenue to the university and manage the trees in a manner more consistent with the university's agricultural mission." (*UCD Olive Oil: A Feasibility Study*, November 2004.) Documented results indicate that the program has achieved those goals:

- "Address the problems of current management practices." Liability claims and legal fees related to olives went from an estimated \$59,042 in 2004 down to zero in the two years since. The cost to maintain the trees, just over an estimated \$105,000 in 2004 has declined to an estimated \$67,300 in the twelve months of the 2005-06 olive oil season.
- "Produce a source of revenue to the university." The 2005-06 olive oil season produced \$46,042 in revenues for the university, with the oil selling out within six months of release. This revenue has reduced the net cost for olive tree maintenance from an estimated \$164,802 in 2004 to an estimated \$55,978 in the 2005-06 olive oil season, a 66 percent decrease.
- "Manage the trees in a manner more consistent with the university's agricultural mission." It was ironic that the university once sprayed antiflowering chemicals on olive trees given the institution's strong agricultural focus. By producing olive oil, the university has aligned its olive tree maintenance practices with its agricultural mission.

This alignment has been beneficial to the university's reputation. All three oils won gold medals at the 2006 Los Angeles County Fair, with one blend receiving a "Best of Class" award. The oils garnered two gold medals and one silver medal at the Yolo County Fair, with one blend awarded "Best of Yolo County." The oils are featured in *L'Extravirgine 2007*, a selective guide to the world's finest extra virgin olive oils. *The Sacramento Bee* food-and-wine editor praised the oils in an article entitled "UC Davis Presses Its Messes" (April 17, 2006). The university has benefited from the public-relations value of these accolades.

UC Davis Olive Oil has achieved the goals set out before the program started. By taking lemons and making lemonade, this model of sustainability and entrepreneurship offers a model for other institutions to consider.