

# Improving Environmental Performance

It improves more than just the environment.

BY KEVIN A. FLETCHER

An Environmental Management System is a voluntary approach to improving environmental performance that often saves both money and resources (Shadow Wood Country Club, Florida).



The environment is a key issue facing businesses of all types, including golf courses, in the 21st century. Reducing risks and liabilities and preventing pollution are part of the solution, but responsible environmental management no longer means simply *doing no harm*. Leading golf courses are also increasing efficiency, reducing waste, and finding business value in improved environmental performance.

## GETTING THE JOB DONE

An Environmental Management System — or EMS — is a voluntary approach to improving environmental performance that has begun to take

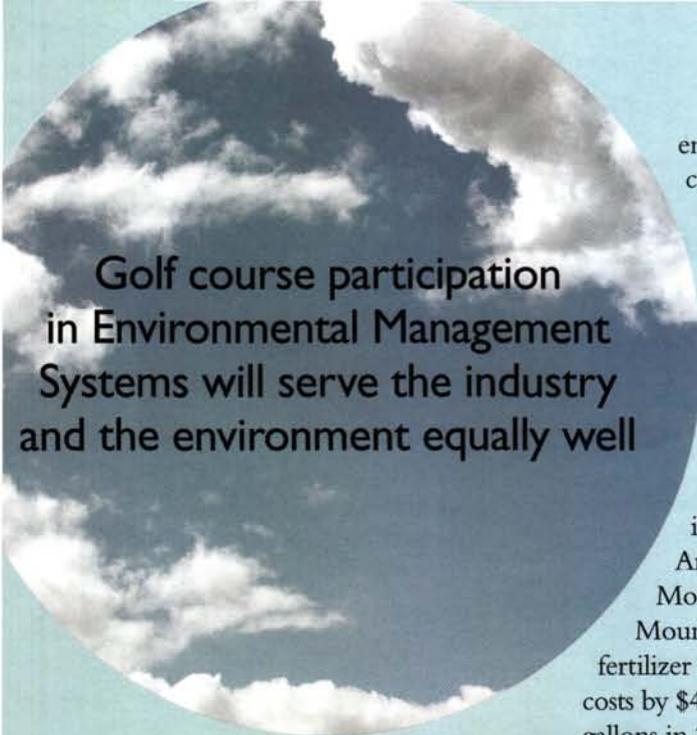
center stage in the U.S. Widely used by companies in Europe, Japan, and a handful of other countries, an EMS provides structure for setting policies and goals, taking action, and measuring results.

An effective EMS follows a common sense formula: PLAN-DO-CHECK-ACT. Using a systematic approach that starts with management buy-in, companies set standards and adopt policies and procedures to meet them. Equally important, they monitor and report the effectiveness of environmental efforts.

Golf courses enrolled in the Audubon Cooperative Sanctuary Program (ACSP) or Audubon Signature Program will recognize this approach. Audubon

International's education and certification programs are built upon these same basic tenets. For instance, ACSP members begin by taking stock of their environmental resources, identifying any potential problems or liabilities, and developing a plan of action to improve environmental performance (PLAN). They then implement the plan (DO), evaluate and document their efforts (CHECK), and make adjustments and improvements as needed (ACT).

Certification in the ACSP or Signature Program serves as an incentive for action and a tool for continuous improvement. In a sense, the process of becoming certified formalizes the Plan-Do-Check-Act formula and provides



# Golf course participation in Environmental Management Systems will serve the industry and the environment equally well

an independent external review and guidance for participants.

## GOOD FOR THE ENVIRONMENT, GOOD FOR BUSINESS

An EMS is a continual cycle of planning, implementing, reviewing, and improving the ways that an organization meets its environmental goals. The results tend to be not only good for the environment, but also good for business. Benefits typically include cost savings from more efficient operations, reduced risks, and improved community relations and regulatory compliance.

After years of taking a regulatory approach to environmental policy, the U.S. Environmental Protection Agency (EPA) has recently come out in support of EMSs. The reason is simple: EMSs are proving to be an effective tool for managing the environment. In contrast to regulation, which is imposed externally, EMSs tend to have greater employee and company buy-in and result in greater innovation and long-term change because they are adopted internally. Likewise, they allow for acting on environmental issues in a more comprehensive and effective way.

## RETURN ON INVESTMENT

According to results documented by members of the ACSP, improving

environmental performance can yield a strong return on investment. Here are a few examples of how golf courses have saved money and conserved resources by implementing best management practices recommended by the ACSP.

- Under the direction of its new superintendent, Anthony Williams, Stone Mountain Golf Club in Stone Mountain, Georgia, reduced fertilizer costs by \$2,100, pesticide costs by \$4,500, and fuel use by 467 gallons in 2005, compared with 2004.
- At Donald K. Gardner Memorial Golf Course in Marion, Iowa, Superintendent David Roe and his crew naturalized 20 acres of turfgrass and added two additional acres of wildflowers. The project cost \$500 and will save \$1,000 per year in maintenance labor.
- State College Elks Country Club in Boalsburg, Pennsylvania, now saves approximately 100,000 gallons of water per complete irrigation cycle. David Williams, CGCS, achieved the savings by altering watering and turf management practices.
- Similarly, Superintendent Jeff Therrien at The Ranch Country Club in Westminster, Colorado, reported that changes in watering and turf management save 3-4 million gallons of water per year.
- Shadow Wood Country Club in Bonita Springs, Florida, has reduced pesticide applications by 32 percent since 2002. By increasing pest monitoring and defining hot spots, Director of Golf Course Operations Kyle Kenyon also reduced herbicide use from a pre-emergent treatment on 290 acres to the treatment of 13 to 75 acres once or twice a year as needed. Reducing wall-to-wall fertilizer applications further saved approximately \$30,000 and 80 tons of fertilizer.

• Superintendent Chuck Manning calculated savings achieved by removing eight acres of turf at Quail Run Golf Course in Sun City, Arizona. The course saved 16 million gallons of water and 800 gallons of fuel needed to maintain the area previously.

• Under the direction of Golf Course Superintendent Pat Blum, Colonial Acres Golf Course in Glenmont, N.Y., became the first golf course in the nation to be recognized through the EPA's National Environmental Performance Track Program. Colonial Acres was certified as an Audubon Cooperative Sanctuary in 1998, and the PLAN-DO-CHECK-ACT process required to earn certification played a large role in gaining recognition by the EPA.

In the U.S. and around the world, EMSs will soon be the norm, not the exception. Golf course participation in EMSs will serve the industry and the environment equally well.

## RESOURCES

"Environmental Management Systems (EMS)," United States Environmental Protection Agency, [www.epa.gov/ems/](http://www.epa.gov/ems/).

"The External Value Environmental Management System Voluntary Guidance: Gaining Value by Addressing Stakeholder Needs," March 2004, Multi State Working Group, [www.mswg.org/documents/guidance04.pdf](http://www.mswg.org/documents/guidance04.pdf).

ISO 14000 Information Center, [www.iso14000.com/](http://www.iso14000.com/).

NDEMS, National Database on Environmental Management Systems, <http://ndems.cas.unc.edu/>.

U.S. Environmental Protection Agency's National Environmental Performance Track, <http://www.epa.gov/performance-track/>.

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