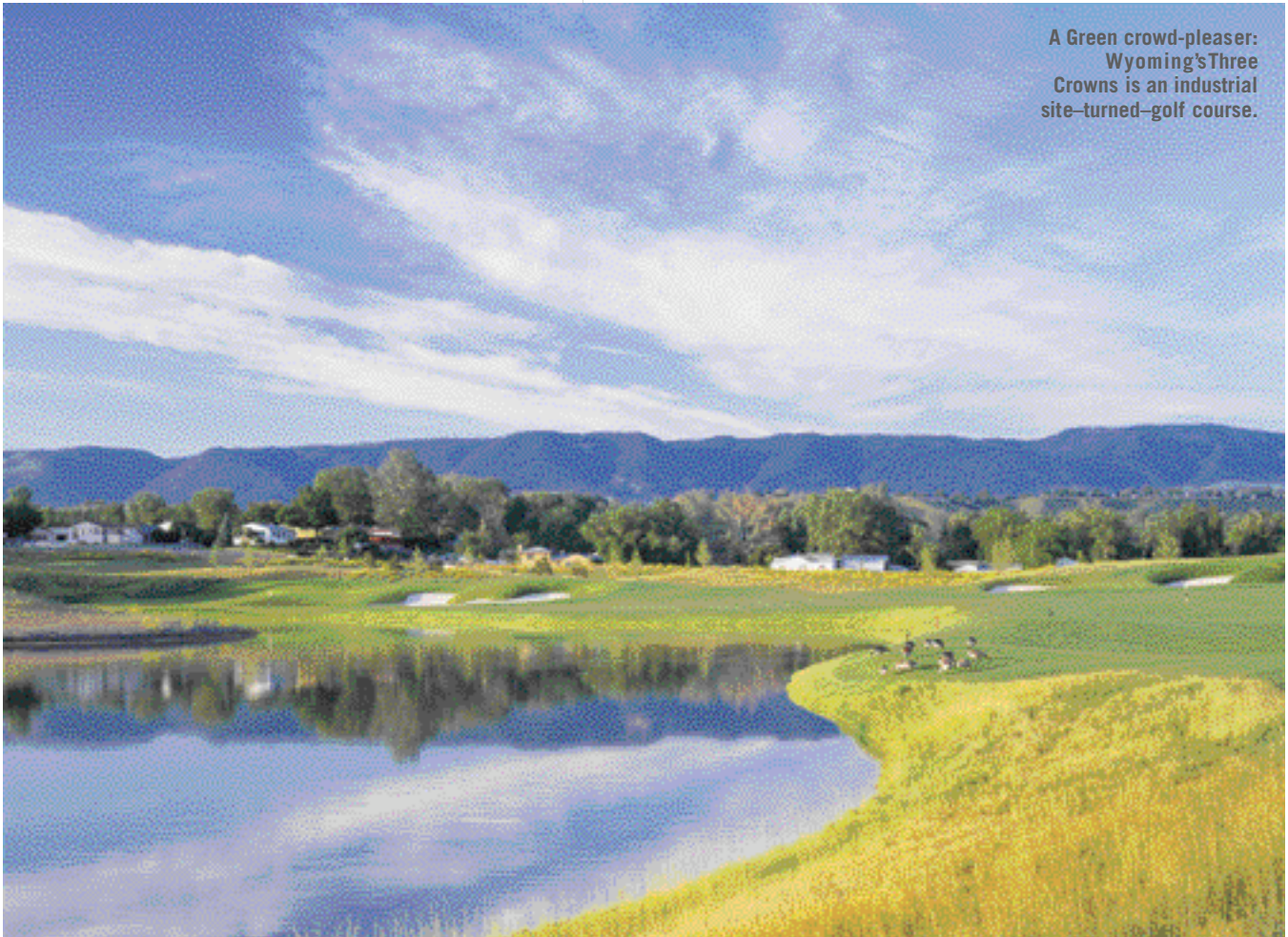


A Green crowd-pleaser:  
Wyoming's Three  
Crowns is an industrial  
site-turned-golf course.



# Green Fees

**A**s you play through the Three Crowns Golf Club, a Robert Trent Jones II 18-hole, 7,065-yard development along the North Platte River in Casper, Wyoming, you'll see spectacular views of Casper Mountain. Eight ponds come into play on 14 holes; 80 bunkers are filled with brilliant white sand trucked in from neighboring Idaho. Tall fescue grasses give a shine to fairways, while the A-1 bentgrass on the greens provides a quick, true roll. The daily-fee course, which opened in 2005, spans 110 acres of a 350-acre complex that includes a jogging trail and parks, and though Casper is unlikely ever to be a big draw to tourists, it's well-used by the local community during the April through October golf season.

Photograph by Rob Perry

With enough money,  
any golf course can be  
made environmentally  
friendly. But many resorts  
are finding that an  
inconvenient truth.

If it all sounds pleasant enough, it's the story you *can't* see that makes the course noteworthy: In the early 1990s, the area was so polluted that you would have been ill-advised to walk your dog here. The site had been a gasoline refinery since 1912, first for Midwest Oil, then Standard Oil, which became Amoco and then BPAmoco in 1998. The industrial footprint was deep—lawsuits and a governmental crackdown predictably followed, and that led to a bio-remediation plan. BPAmoco paid some \$200 million for the cleanup alone, which began in 1998 and eventually included plans for a golf course.

"There were thousands of miles of

the results were dazzling, including national engineering awards and recognition by *GolfWeek* for one of the best new golf courses of 2006. "What was a pollution eyesore became a beautiful addition to the community," says Alice Kraft, executive director of the Amoco Reuse Agreement Joint Powers Board, a citizen group. "It's prosperous and well-used, and people have really supported it."

THREE CROWNS MAY BE A FINE EXAMPLE of environmentalism, but some observers say it is also an exception to the rule of golf's generally poor record. Given that much of the sport's appeal is the out-

colors with a good golf course."

The inconvenient truths are not news to the industry. The United States Golf Association's "Green Section," where agronomists deal with turf management, has studied the issues for years. In 1996, a coalition of industry and environmental activists created "Environmental Principles for Golf Courses in the United States," a document of guidelines for the future. Participants included the Golf Course Superintendents Association of America, Friends of the Earth, the American Society of Golf Course Architects, the USGA and others. In 1991, Audubon International, then called the Audubon



Palm Desert, CA's Firecliff was an early environmental success story.

pipe that had to be taken out," says John Strawn, the chief executive of the Palo Alto, California-based golf design company Robert Trent Jones II, LLC. "The engineers had a bulkhead wall installed for two miles that went down to the bedrock so that no groundwater would leave the site." The water is pumped up, cleaned by a wetlands treatment system to remove any oil, then directed to Soda Lake, a wildlife preserve two miles away. The system under the course processes one million gallons per day of recovered groundwater, and the runoff of oil would fill a tanker a week.

Big Oil and golf might have seemed to some environmentalists like an alliance between Lex Luthor and Darth Vader, but

doors, the notion that it's not especially eco-friendly is as ironic as it is discomfiting. But golf's challenges are apparent. It takes a lot of water to keep grass growing and steady doses of pesticides, herbicides and fertilizer to keep turf thick and weed-free. The water-chemical cocktail runs off and filters down, so that the damage leaks and spreads. Harvesting trees to create wide lanes of fairway does little to make the hearts of bird-lovers soar, nor is all the accompanying development—housing complexes, clubhouses, parking lots—especially beneficial to wetlands or wildlife habitat. "The average person doesn't understand the elements of a good design," Strawn says. "He's going with what he sees, and he associates bright

Society of New York, began a program to register and certify golf courses that adopted environmentally friendly practices. Indeed, the certification program was the *maison d'être* of the organization, which began as a breakaway group from the National Audubon Society, with which it is not affiliated and has had a rancorous relationship, including a lawsuit over use of the name "Audubon." (Audubon International successfully defended itself; the court agreed that the name had passed into the public domain.) Ninety percent of the organization's activity and all of its operating revenue come from annual dues paid by members, including golf courses. The 11-employee nonprofit's budget is less than half a million dollars.

The certification is a marketing tool, not unlike a *Good Housekeeping Seal of Approval* for golf courses. The name “Audubon” softens otherwise resistant elements and has a feel-good quality with the public. It “was something that was done on our own [because we] thought it would be good PR,” the course superintendent of the Ocean Course at Kiawah Island Golf Resort wrote in an e-mail.

Joining the program isn’t difficult. To be listed in the Audubon Cooperative Sanctuary Program, a course need merely be open for play and pay the \$200 a year dues (\$250 for members outside the U.S.). Registrants receive educational materials but are not required to act on them. To gain certification, a course has to meet six requirements, such as testing surface water and correcting any problems, including any chemical contamination or runoff issues. Courses that store chemicals have to show that they’re handling them according to the Environmental Protection Agency label, and they must have a spill containment plan in place in the event of a mishap. A signature program is available for courses in the process of being built, which gives Audubon International greater influence in a course’s structure and maintenance.

Audubon International says its goal is to “make [each course] better than they would have been” without some interven-

tion, says Joellen Zeh, the group’s program manager. The organization will work with any course, but participation has been light. “In 2002,” Zeh says, “we challenged the industry to register 50 percent of golf courses.” By 2007, just 13 percent were registered, including some with enough stature that others might have followed their lead, including Pebble Beach, three Bethpage courses and Saucon Valley. Altogether, 2,150 courses in 27 countries are registered.

Even that figure, though, paints a somewhat rosy picture. Merely registering with Audubon requires no mandatory changes to course operations, and of the 2,150 that

did register, only 520 U.S. courses took steps to get fully certified. That’s about three percent of 17,000 American golf courses. “The excuses are that it’ll be too expensive, it’ll take too much time and it won’t make a difference anyway,” Zeh says. “My all-time favorite was from a superintendent who told me he couldn’t have Cub Scouts wandering around fairways while people are playing golf.”

“We know that we make a difference,” Zeh adds. “It’s also important for the industry to be able to demonstrate that they’re doing the right thing. Are some doing the right thing? Yes, but they can’t prove it unless they’re in the program.”

THERE ARE WOULD-BE REFORMERS and critics within the game.

“Awareness is growing,” says Michael Osgood, director of sales and marketing for Desert Willow Golf Resort, whose two courses, Firecliff and Mountain View, are owned and operated by the City of Palm Desert. “But there is no [government] regulation and golf isn’t regulating itself. The sport is traditional. It’s about grass, trees and flowers. That’s what golfers want. If word gets out that your course is brown, you’re in trouble. The tour doesn’t play courses with brown spots; the magazines don’t show pictures of courses with brown spots. Golf’s about being

lush—green fairways and blue water. To most golfers, that’s pure. Well, it takes a lot of water to keep that up.”

Back when Three Crowns was still an environmental debate, Desert Willow was in the forefront of building environmental courses. Firecliff, a Michael Hurdzan design that opened in 1997, made the cover of *Smithsonian* magazine. Osgood credits forward-thinking local officials. The courses use the desert landscape, with turf on just 75 of 120 acres. The 45 acres of waste area are decomposed granite, a.k.a. desert gold, that do not need irrigating. Reclaimed water provides half of its irrigation needs, and the natural design means

less turf to begin with. Water-efficient plants are threaded with rubber tubing that dispenses droplets of water using a computer-controlled central irrigation system that adjusts output according to need.

If all of that seems like a lot of work, Osgood notes that ultimately golf may have to learn an age-old lesson from Mother Nature: Adapt or die. “We have 120-degree heat here in the valley,” Osgood says. “Think about how many air conditioners we have running. That’s a lot of electricity. We also have over 120 golf courses. It’s only a matter of time before the aquifers are used up.”

For their part, some environmentalists sound almost conciliatory, believing that the industry can be persuaded to change its ways for its own good. Golf offers a lot of challenges common to those attempting to find harmony between economic development and sustainable environmental practices. “You have to look at each course,” says John Flicker, president of the National Audubon Society, which has no direct relationships with golf courses. “Some are better than others. The environmental movement hasn’t reached golf, but there are owners who are trying to do better, and that’s a good thing. Would we like to see everyone doing more? Sure.”

John Strawn, the Trent Jones II executive, acknowledges that the sport has a problem in its image and in fact. “I’ve been on planes and people asked what I did, and when they heard I was in golf course design, they looked at me like I said I was dealing drugs to children. We’ve done a terrible job of getting the story out about the positive things we’ve done. There are bad situations, no question, but I think there is more scrutiny now and a lot of developers are finding out that people like eco-friendly plans, integrated pest management and so on. They get premiums on lot sales. It’s like buying a Prius. People like it.” And as they apprehend more of the consequences of environmental negligence, they hope that other courses pick up the pace of ecological efforts and keep the game from being left in the dust. •

## “Golf’s about being lush—green fairways and blue water. To most golfers, that’s pure. Well, it takes a lot of water to keep that up.”