

CHALKBOARD

TIPS FROM THE PROS

GOLF COURSE ARCHITECTS ADAPT TO ENVIRONMENTAL CHALLENGES

By Pete Dye



This marsh was left untouched during design and construction of Spanish Bay Golf Links in Pebble Beach, CA.

We're all familiar with golf's most common playing challenges, but designing a golf course today presents a whole new set of challenges. Environmental concerns have heightened the awareness of every project planned for open areas, and these have drawn the attention of more legislators and regulatory panels than anything else I can recall.

What is demanded from course designers, and rightly so, is compliance in such key areas as wetland preservation, use of freshwater supplies, and pesticide impact of groundwater. Receiving these assurances is a process that can defer a project for years, and hold up the necessary permits until the issue can be studied in its entirety.

To speed up the approval process, members of the American Society of Golf Course Architects (ASGCA) are working hard to identify the problem areas and propose alternatives. The ASGCA Foundation, for instance, recently commissioned a study by Dr. Martin Petrovic of Cornell University on the effects of nitrates on groundwater. That report will be available in the next month.

Although studies have shown that properly maintained golf facilities not only don't destroy the surrounding environment but actually embellish it, we have to gather even more concrete data to support our case. The current evaluation of the Baltimore, MD, public courses, for instance, will be an important building block in that process.

No issue has raised the level of consciousness higher than the subject of wetland and marshland boundaries. Thus, integrating wetlands into the framework of a Master Plan without jeopardizing the natural habitat—or the playability of the course—has become a major challenge to golf course architects.

In the last four years, as wetlands have risen higher and higher on the list of environmental priorities, regulatory agencies have been more demanding in their reviews. This has slowed the procurement of permits as a project moves slowly through a series of public hearings.

Wetlands, which include swamps, marshes, bogs, and fens, are a valuable commodity in their ability to be a source of plant and animal life. They provide breeding and nesting grounds—or rest stops—for migratory waterfowl. The fact is, wetlands

have been reduced to less than 99 million acres from the 215 million that existed in 17th Century America, so it is imperative that we protect a valuable natural resource.

Whether the issue be wetlands, silica dunes or other protected types of habitat, golf course architects have designed golf courses which are becoming models of environmental responsibility. Three of my colleagues proved their mettle by successfully blending outstanding golf courses into environmentally sensitive sites.

Bull Valley in Woodstock, IL, which is slated for completion this summer, is a typically flat area endowed with hills and valleys that feature elevation changes of up to 30 feet. In treating the wetlands, Dick Nugent of Long Grove, IL, and Bruce Borland (who has started his own practice in Palatine, IL) provided a routing plan that made sure wetlands were located away from primary target areas on the course.

The purpose was to prevent golfers, who have the misfortune of missing their intended target, from slowing up play or endangering wildlife species. They created a buffer zone for wetlands by surrounding them with open water. By doing so, they also made sure that tall wetland plants do not obstruct the sight lines of the course.

Nugent and Borland are just two Illinois course architects working with environmental issues. Others include Ken Killian of Palatine, Bill Spear of St. Charles, and Bob Lohmann of Crystal Lake, who designed Settler's Hill in Kane County, one of the growing number of courses to be built on a landfill.

Spanish Bay in Monterey, CA, is an excellent example of a design that incorporated recycled acreage. The oceanside Scottish

links course, which opened in 1987, was designed by Robert Trent Jones, Jr., in cooperation with Tom Watson and Frank Tatum. Spanish Bay is acclaimed for its careful reconstruction of more than 50 acres of old silica sand dunes destroyed in the 1930s by mining.

Metedeconk National Golf Club in Jackson Township, NJ, has the distinction of being the first new private course to be built in New Jersey since 1969. It is the state's first environmentally conscious layout since such restrictions were imposed on land usage. Robert Trent Jones, Sr., and his design associate, Roger Rulewich, made the wetlands an integral part of the course without affecting its playability.

Golf course architects are eager to discuss all the alternatives and solutions to increasing environmental challenges. For this reason, "The Environmental Challenge" was chosen as one of the central topics for discussion at the ASGCA annual meeting last month. Included on the program were professional development seminars on "Golf Course Groundwater Contamination" by Stuart Cohen, a consultant with Biospherics, Inc., and "Turfgrass Management" by Bill Bengeyfield, director of the United States Golf Association Green Section.

It behooves us to learn even more about how a golf course impacts the environment if we are to meet the tremendous demand for new courses in the next decade. Architects must continue to be adept at exercising environmental responsibility, since it is so paramount to the continuing life of a project.

Editor's Note: Pete Dye is president of the American Society of Golf Course Architects.