

Green greens are a new environment for golf

By [Steve Myrick](#)

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The Vineyard Golf Club in Edgartown opened its doors in May of 2002, charged by the Martha's Vineyard Commission with organic management conditions that many thought were impossibly difficult. Now in its sixth season, barely a day goes by when course superintendent Jeff Carlson does not get a call from another course superintendent, a golf industry official, or a local permitting authority.

Some callers are skeptical, others are envious, but it is a fair bet to say that almost all are amazed that he keeps the course playable and the membership happy without using synthetic pesticides or fertilizers.

When Mr. Carlson began his stewardship of the course, he was among those most skeptical. "I thought there was a good chance we'd be playing on dirt," said Mr. Carlson. "It was either a leap of faith or not thinking things through properly. I've been known for that," he added with typical self-deprecating humor. Actually, Mr. Carlson is known, after 30 years of experience managing golf courses, for responsible administration with an eye toward the environment.

Long drive

The Vineyard Golf Club successfully emerged from the Martha's Vineyard Commission (MVC) regulatory process after one of the fiercest regulatory battles in recent memory.

Throughout the long process, the developers repeatedly promised that the course would be among the most environmentally sensitive ever built.

The club developers also forged a strategic business relationship with the Sheriff's Meadow Foundation, a respected Island conservation group, which would prove beneficial to both parties.

As part of the original agreement, Sheriff's Meadow continues to exercise environmental oversight over some areas of the golf club, in particular a 25-acre frost bottom that is protected from any development.



Open layout and good drainage help the Vineyard Golf Club maintain the course using only organic products.

Photos by Steve Myrick

Although the conditions the Martha's Vineyard Commission imposed on the course were daunting, starting from scratch had its advantages.

"Every variety of seed we used on the golf course was selected for resistance to diseases common to our area," said Mr. Carlson. "The golf course you see has a lot of open areas - we made sure we had good drainage, good air circulation. We took our topsoil and we piled it up and composted it so it had a lot of natural resistance to disease. We try to use as little water as possible, try to keep our nitrogen use low, and keep the turf dryer. If you run your golf course like that, you'll have fewer diseases. Most diseases need water to develop."

Lush factor

Golf course beauty, it seems, is in the eye of the beholder. Looking out over the 18 hole course just off the West Tisbury Road in Edgartown on a recent June afternoon, an experienced eye might notice the difference between this organically managed course, and a more conventional course managed with synthetic turf products. A less experienced eye might not. The fairways and greens seem a shade less lush, but not much. The cart paths are sand, or gravel, not pavement. Tees and fairways are not lined with leafy canopies, instead the holes are designed in a more open layout. The vegetation, including the course's signature shimmering fescue grass, or field hay, blends into the surrounding landscape.



Jeff Carlson, course superintendent at the Vineyard Golf Club, has won three awards for his environmental stewardship.

"It's important for golf as an industry to try and focus on playability as opposed to visual perfection," said Mr. Carlson. "If every blade of grass in a hundred acres has to be perfect all the time regardless of weather conditions, regardless of disease, then that's going to require a lot of chemicals. If you can accept some blemishes here and there and still have great playing conditions, then you have the potential to use a lot fewer pesticides."

Managing member expectations

Managing a course without synthetic pesticides goes far beyond the maintenance sheds. Mr. Carlson says he tries to keep an open line of communications with members of the private club, through newsletters, announcements, and conversations. Managing their expectations may be as important as anything he puts down on the turf. "People are becoming much more sensitive to the environment, and everybody's impact," said Mr. Carlson. "A lot of that is up to the golfer. These members are way ahead of the curve as far as perception of that, and living with it, and being supportive of it."

Members are also mindful of expense. If organic course management was a lot more expensive, it would have a tougher time gaining acceptance. Mr. Carlson has come to the conclusion that organic and conventional course management cost about the same, though the money goes to different places. Instead of paying for a synthetic product to kill weeds, much of the weed control at the Vineyard Golf Club is done by hand. In general, labor expenses are higher with organic management, but product costs are lower.

Driving to fairway-like lawns

In more than 30 years of environmentally aware management of golf courses, Jeff Carlson, superintendent at the Vineyard Golf Club, has developed some methods that

can be helpful to the average homeowner. Of course, natural vegetation is usually better for the environment than growing grass, but if you have a lawn, these tips from Mr. Carlson can reduce the negative impact.

- Don't sod but seed your lawn. Seed in the fall, when there is less competition from weeds.
- Use fescue grass and bluegrass. They require less fertilizer.
- Fertilize in the fall, preferably late September, with a natural organic fertilizer. Mow your lawn when it's dry and let the clippings return to the lawn, no bagging. This will return nitrogen to the lawn.
- Be patient. Drought and disease do not, in most cases, occur overnight, nor do the lawns recover overnight.
- Give your lawn "tough love" with watering practices.
- If necessary, consider treating for grubs and weeds chemically once every two to five years, rather than annually.

Organics mechanics

The same kind of confusion surrounding products labeled organic in the grocery store sometimes translates to the products used to maintain a golf course. According to Mr. Carlson, there are as few as three, and no more than ten, organic golf courses in the world, depending on how you define the term organic. There is no central authority that decides what is organic and what is not, so the club's permits require that a local committee review every product that goes on the course.

Bill Wilcox, water resource planner for the Martha's Vineyard Commission, sits on that committee, and feels the Vineyard Golf Club has done a very good job following the commission's mandate. From his seat, there may be cause for some modification of the conditions, but for now, if the active ingredient in any produce is synthetic, it is not allowed.

"It turns out that managing a golf course according to the strict definition imposed on it is extraordinarily difficult," said Mr. Wilcox. "It's very hard to find products that are clearly, totally organic."

"Organic" does not mean the same thing as "not harmful." Some synthetic products, when used correctly, do virtually no harm. Organic products, used incorrectly, might do great harm. "Say you use a natural organic fertilizer," said Mr. Carlson. "It still has nitrogen in it. If you put it down at the wrong time of the year, or you put it down in a rainstorm, that's still going to wash off and eventually that's going to show up as nitrates in the ground water. Application and timing is as important as the product you use."

Strategically placed around the course are a series of test wells at varying depths. There are also measuring devices called lysimeters below the turf, to gauge the impact of the golf course on the local eco-system. According to Mr. Wilcox's measurements, the amount of nitrates in the test wells is well under the state's standard of 10 parts per million for drinking water.

Mr. Wilcox estimates the 235-acre facility adds about 500 kilograms (a kilogram is about 2.2 pounds) of nitrogen to the environment annually, which is within the allowable permit limits. The club lies within the Edgartown Great Pond watershed. By comparison, he estimates that the septic systems for the approximately 1,000 homes in the watershed, many of which are on ecologically sensitive shoreline, collectively add about 8,000 kilograms of nitrogen annually.

Rounds of applause

Mr. Carlson's work has earned him a reputation as a respected resource for information and knowledge about organic course management.

Earlier this year, The Golf Course Superintendents Association of America (GCSAA) awarded him the President's Award for Environmental Stewardship. It is the third time Mr. Carlson has been honored for his environmental stewardship.

"He has chosen a different path of golf course management," said GCSAA President Ricky Heine. "Jeff has created awareness for environmental practices, and he has been a leader in meeting environmental challenges."

It is all quite a trial, but one Mr. Carlson enjoys. "I have a really interesting job. It's exciting to come to work every day."