

Building a Putting Green in the Backyard

By Jim Morris

To the fanatical golfer, a backyard putting green sounds like a dream come true - a personal oasis to perfect the short game and lop strokes off the handicap. To most turfgrass specialists and golf course superintendents, it sounds more like a nightmare. It's not even the hefty cost of construction that frightens them. It's the never-ending maintenance. Rather than picturing leisurely evenings of putting, they see countless hours of cutting behind an expensive greens mower. And they see the need for an expert's eye to spot disease, insect and fertility problems before they become uncontrollable. If your landscape clients or the golfers playing your course ask whether you can help them build a backyard green, consider first how the experts are answering this question. The Experts say: Stay Away "We get a lot of calls about it, and it drives us nuts," said Jim Snow, head of the US Golf Association's Green Section. "If they ask, we try to discourage them. Most people have no idea of how much maintenance is involved."

Turfgrass consultant Dr. Henry Indyk is more direct. "My advice is and has been: Don't do it."

Indyk speaks from textbook and real world experience. An extension specialist emeritus from Rutgers University, he has consulted on thousands of turf problems around the world, including an ill-fated golf green in his own backyard more than 20 years ago.

When his son was 12, he badgered Indyk into building one at home. "I agreed on one condition: he had to take full responsibility for cutting it," he recalled. That deal lasted less than two weeks. "I think he mowed it the first two or three times, and then I did it the rest of the time," Indyk said. Within months he dug up the green to create a garden for his daughter. Yet the call of the green continues to attract enthusi-

asts like John Skuro who are willing to endure painful learning curves to create their backyard oasis.

Skuro, an engineer with no formal turf training, made a crucial mistake in his first attempt at building a green four years ago. He didn't design the drainage properly, and the result was several low spots where water collected into pools. He corrected the problem by trucking in another 12 tons of sand and soil mix and essentially built a new, better-drained green on top of the old one. Skuro estimates he has at least 1,000 hours invested in building his 1,000 square-foot green and nearby bunkers of Virginia White Sand. "I'm trying to encourage people to build one in their backyard. It's a kick," he said. "The concept is not to be perfect. It's to have fun doing it." Motivation is an important factor in taking on a commitment of this scale. "If you really love golf, don't do it. You'll spend all your time maintaining it instead of being out there playing," said Steve Langlois, a turf consultant who built and maintains a nine-hole, 15,000-square-foot natural turf miniature golf course for a client. "If you enjoy cutting it and taking care of it, then you might consider it."

Skuro built his green less for his love of golf than for his love of his father, he said. He had only golfed three times before taking on the project. However, his dad is a former scratch golfer who built a backyard miniature golf course at his Long Island home, and Skuro knew it was a project they could appreciate together.

"Just watching him enjoy watching me build it was worth it," he said. If you have the right motivation, then just make sure you get the drainage right, according to golf turf experts. "If real estate is location, location, location, then golf greens are drainage, drainage, drainage," said Ron Turek of Stephen Kay Architects in Bronxville, NY.

Drainage was an unexpected challenge for Doug McGregor, who owns and operates McGregor Landscaping in Far Hills, NJ. He built a backyard green two years ago just for the challenge. "I love golf courses. I love playing, but I'm a horrible golfer," he said. "I just wanted to see if I could do it."

With a bachelor's degree from Utah State University, 14 years experience in landscape construction and maintenance and a short stint on the grounds crew at Baltusrol Country Club, a Golf Digest Top 100 course, McGregor fully understood the time commitment of maintaining a green.

For him, the surprises came while building and establishing the green. He built his 18-by-20-foot, oval-shaped green into a hillside. His design included a two-foot rock wall on one side, and the green pitched downward two inches to channel rain off the bentgrass. The drainage looked good to him on paper, but took only one thunderstorm to prove the system inadequate. As runoff cascaded over the wall onto the green, McGregor and a friend took pickaxes and shovels into the downpour to install four-inch perforated pipe under the circumference of the green to collect water and pipe it to a nearby stream. The combined surface and sub-surface drainage system have worked fine ever since, he said.

Seeding was another problem. In his first attempt at establishing bentgrass, he waited too long before cutting it for the first time. When he did cut it, it shocked and weakened the turf so much that pythium blight overran the green.

His second attempt brought success - barely. "The first time we cut it was nerve-wracking. The grass was so young and so tender that the mower mashed it down so much we had to use a blower to make it stand up," he said. More than two years later, the green is alive and well.

Greens mowers can be an important cost factor in deciding whether to build a green. New mowers can cost more than \$5,000 and used ones often sell for more than \$1,000. Skuro, the engineer who built his own green, found a discarded manual mower and tinkered with it to meet his needs.

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At the other end of the cost spectrum, Charlie Sheaf's client recently laid out \$5,500 for a new Toro greens mower. Sheaf inherited the maintenance of a 5,000-square-foot front-yard green, which the client had built on his property down the road from the US Golf Association's headquarters in Far Hills. Even though Sheaf had more than 10 years experience in the landscape business before taking over maintenance of the green, he has relied heavily on the advice of Bob Dwyer, superintendent at Somerset Hills Country Club, another top 100 course in nearby Bernardsville. In the past two years, he has struggled with outbreaks of pythium, sod webworm and cut worm as well as algae and moss. Once, a subcontractor missed a scheduled Friday fungicide application, and by the time he saw the green again on Monday, it had been overrun by disease, he said.

Sheaf has been forced to learn quickly the difference between maintaining residential turf and the narrow tolerances of bentgrass golf greens. "Golf greens are a whole different science," he said. "After two years, I was going to put up a green by my house, but then I decided it was too much trouble."

What it Takes to Build Greens

If you are thinking of building a backyard golf green, the experts at the US Golf Association may first try to convince you it's too much trouble. If you decide to forge ahead anyway, they will advise you not to follow their design guidelines.

The reason: building to USGA specifications for a backyard green is like killing a mouse with a cannon. USGA greens use a high sand content mix for the root zone and an elaborate subsurface drainage system to ensure water will move quickly through the green. These specs are designed to avoid compaction and drainage problems often caused by heavy traffic, said Jim Snow, head of the USGA's Greens Section.

They also drive up the cost of the green. A USGA-spec green can easily cost \$20,000 to \$25,000 at the low end and \$60,000 to \$80,000 at the high end, according to Snow.

Golf turf experts recommend using less expensive, less elaborate drainage designs for a backyard green. Good design included elevating the green above the surrounding soil, a good sandy-loam topsoil for the root zone and a slope of about 1 percent to provide

adequate surface drainage. "It has to have good surface drainage so that when it rains hard, it will run off," said Snow. The key is to make sure your design provides for good drainage, the experts agree. Most also recommended an irrigation system as a more convenient alternative to hand watering.

And if you are not seasoned in the art and science of turf disease, insect, weed and fertility issues, consider contracting with a local golf superintendent to provide that insight, said Snow.

To maintain a 5,000-square-foot green for a client, landscape contractor Charlie Sheaf relies on a respected local superintendent, Bob Dwyer, for advice. "You really need to have someone who knows what they're doing. It's a lot harder to maintain a green that anybody can imagine. Just ask a superintendent."

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