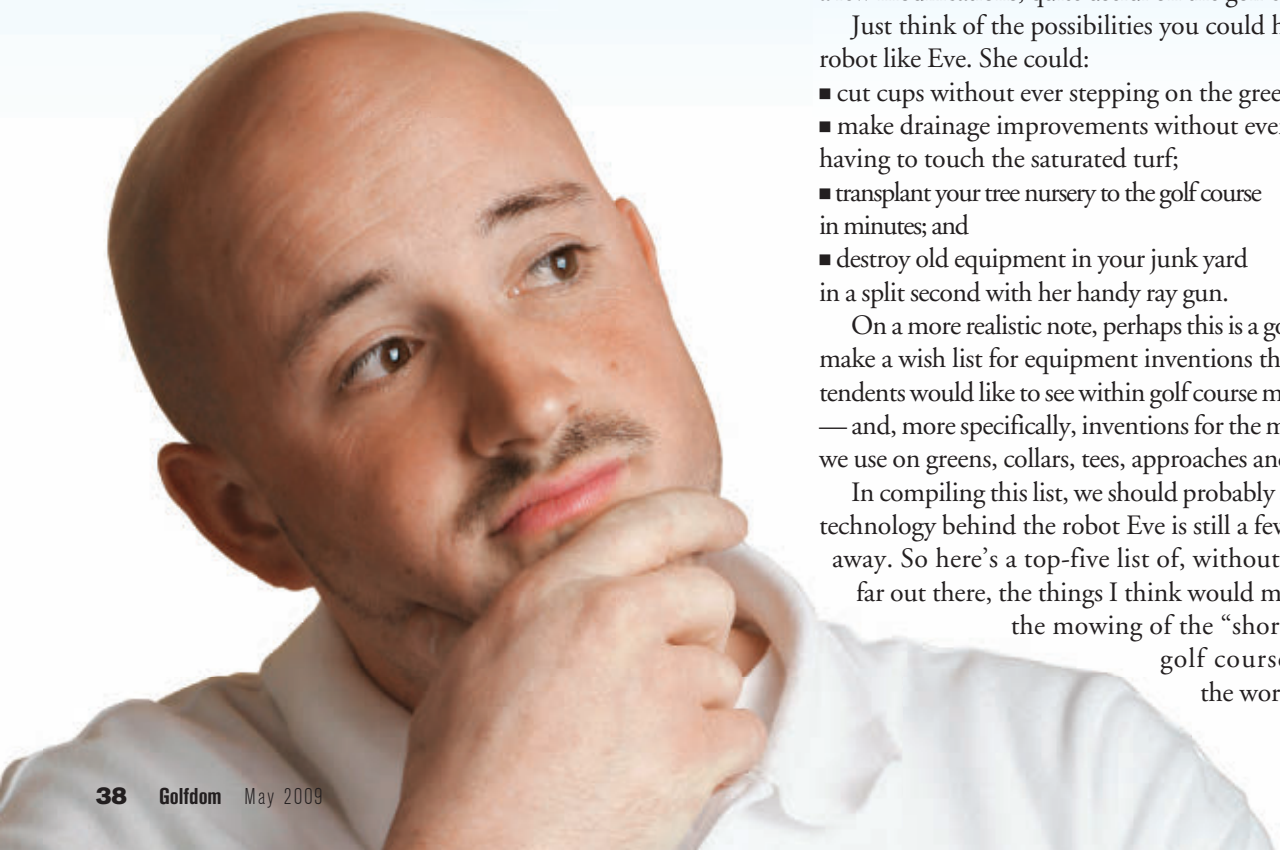
I Wish I Had a a Mower That Could ...

Superintendent offers **top-five list** of what he hopes future mowers can do (not that he isn't impressed with what they can *already* do)

BY RON FURLONG, CONTRIBUTING EDITOR



Watching the film "Wall-E" recently with my two daughters got me thinking about future inventions in the area of robotic golf course maintenance equipment (I really need to work on separating work and home life).

Wall-E himself (he's a little trash compactor, for those of you who don't have kids) might be a little rough on turfgrass, unless he comes equipped with more turf-friendly tracks. But Eve, the slick, multi-purpose hovering white robot from the movie, could be, with a little tweaking and a few modifications, quite useful on the golf course.

Just think of the possibilities you could have with a robot like Eve. She could:

- cut cups without ever stepping on the greens;
- make drainage improvements without ever having to touch the saturated turf;
- transplant your tree nursery to the golf course in minutes; and
- destroy old equipment in your junk yard in a split second with her handy ray gun.

On a more realistic note, perhaps this is a good time to make a wish list for equipment inventions that superintendents would like to see within golf course maintenance — and, more specifically, inventions for the mowers that we use on greens, collars, tees, approaches and fairways.

In compiling this list, we should probably assume the technology behind the robot Eve is still a few centuries away. So here's a top-five list of, without going too far out there, the things I think would most benefit the mowing of the "short stuff" on golf courses around the world:

PHOTO BY: ISTOCK INTERNATIONAL INC.

5 Clipping reduction on fairway mowers — I know some clubs are able to basket their fairway clippings, but for many others (my own club included) this is not an option. What we non-basket-catchers are left with is using plant growth regulators, mowing as often as we can, and mowing when possible in dry conditions (i.e., in the afternoon as opposed to the morning).

I have yet to see a fairway mower that can produce a clean cut with no clippings in wet conditions.

4 A more widespread ability to use alternative fuels in our mowers and golf cars — Hydrogen fuel may be the fuel of tomorrow. And tomorrow may be here sooner than we think. The landscape is literally changing before our eyes — and we must adapt to it.

3 Addressing noise and emissions concerns — This is a huge issue already for many golf courses, and it's only going to get worse with new regulations and a changing environment. Mowers, blowers, golf cars and just about everything golf courses use are going to have to be more environmentally friendly as we push forward. I know, great strides have been made in the last 10 years, but they are not going to be enough in the future.

2 More multi-purpose mowers (i.e., the ability to change height of cut on the go) — On a normal summer day, we usually have seven different heights of cut going on simultaneously — greens, collars, approaches and tees (usually the same height), step-cut, surrounds, primary rough and secondary rough. The ability to have a mower that could, with the push of a button, change from one height to another would be quite useful. Obviously, the same mower could not cut the secondary rough at 2.5 inches and turn around and cut the greens at .115, but some kind of overlap from, say, greens to collars or collars to approaches would be welcome. I know this technology does exist at a certain level, but making it more user-friendly for the operator would be a nice advancement.

1 Thinking mowers — I know this is coming, but wouldn't it be great to have a fairway mower know, for instance, that its own center reel is not cutting as good as the other four reels? Or know that it is about to hit a sprinkler head that didn't go down all the way the night before? Or know when a golfer is standing on the tee behind it, even when the operator is unaware?

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One thing I realized, as I began thinking about this wish list, is the great advancements have already been made in this area over the past several years. I think this deserves not only our attention, but a top-five list itself. So here is a quick top-five list of the best advancements in recent years that have made cutting the short stuff a heck of a lot easier for golf maintenance personnel:

5 Super-lightweight fairway mowers — Living in western Washington state, I know firsthand the benefit of these amazing mowers. Being able to mow fairways during the steady winter rain in this climate, even in saturated conditions, is an ability we simply didn't have 10 years ago.

4 Electromagnetic attachment of bedknives to reel mowers — It doesn't sound like much, but this simple innovation has been a huge time-saver. Sometimes the simplest inventions turn out to be the best.

3 Electric mowers — Although we still have a long way to go with this technology, the path has been cleared. We need to get this technology off the greens and onto the fairways as well.

2 Flex mowers on greens — The invention of the flex walk-behind greens mower (like the Toro Greensmaster Flex 21) has, arguably, been the single-greatest mechanical advancement on golf courses in recent years. The ability to mow severely contoured greens without fear of scalping — and avoiding all the negatives this brings with it like moss invasion, disease invasion and playability issues — has allowed us to cut lower than ever before (and still sleep at night).

1 GPS technology utilized on the golf course — This is still evolving, and will be for many years. But being able to determine turfgrass health by using sensors and showing you different turf conditions is, well, amazing to me. It's astounding that sensors can show you weather conditions and ET rates throughout the golf course. And the ability to use GPS to help you fertilize areas that need it and adjust your spreader for higher or lower application rates is incredible. Many of the possible GPS functions could ultimately lead to our ability to manage the short grass on the golf course with more precision than ever imagined. The list for potential GPS use is literally mind-boggling. ■

Furlong, superintendent of Avalon Golf Club in Burlington, Wash., is a contributing editor to Golfdom. And even though he loves technology, he hopes no one invents a robotic superintendent.