Golf course shows the greener way

Canada's top eco golf course is valued by golfers for the velvety greens and by environmentalists for green initiatives. Homeowners can adopt tips for their own bit of turf

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I've got to admit I was skeptical. I guess I've gone on too many press trips where something billed as an "eco hike" turns out to basically a walk in the park (I packed hiking boots for this?) or a "green resort" is just one where they do a bit of composting and urge guests to hang up their towels if they don't need washing every day.

So when I was told that I'd be seeing Canada's top environmentally managed golf course in Manitoba, I didn't expect much. I figured that to sustain those beautiful greens, all golf courses needed to be water-guzzling environmental drains that rely heavily on pesticides and herbicides to maintain an unnatural ecosystem.

I was wrong.

Clear Lake Golf Course, in Riding Mountain National Park in Manitoba, is as beautiful a course as you can imagine. Emerald green fairways tumble between tall evergreens and roughs of wildflowers border perfect greens.

But this is a course that runs on solar power, biodiesel and compost -- loads and loads of compost.

Perhaps the most out-there features on the course are the composting toilets. They use no water. Red wriggler worms break down the human waste into liquid fertilizer that can be sprayed on the rough and solid bits that can be added to flower beds. The toilets come from Clivius Multrum, a U.S. company owned by Abby Rockefeller, who happily calls herself the back sheep of the Rockefeller family.

"We've calculated that we save 300,000 gallons of fresh water a year by using these toilets," says Greg Holden, course superintendent. "When you think about it, it's a real waste to use three to five gallons of water to flush away eight ounces of human waste. But the best part is that we're using waste as a resource."

In the 16 years that Mr. Holden has been caring for the course, that's been his guiding goal: using stuff that could be treated as waste as a valuable resource.

Food waste from the pro shop, the clubhouse restaurant and the snack shack is composted along with 2,000 pounds of clippings that are collected off the greens each week. (The clippings from the fairways are left in place, to provide mulch and nitrogen for the grass and soil.)

"The food waste and clipping are a huge source of lush, green nitrogen, then we mix them with leaves, twigs and straw -- basically anything brown, even unbleached paper products -- for

carbon," says Mr. Holden. "We turn the mixture every week and end up with 6,000 to 7,000 pounds of finished compost per year. We've turned waste into a resource. We could use way more compost on the course than that, but we've made an 85 per cent reduction in what goes to landfill just by composting."

Mr. Holden has also arranged to pick up the used cooking oil from 13 area restaurants, drive it to a processing facility, then uses the biofuel to power his mowers and other lawncare equipment. The golf carts are all electric.

When he first arrived at the course, his goal was to meet the standards of the Audubon Cooperative Sanctuary Program, with measures such as wildflowers in the roughs.

"A golf course can be a wonderful habitat for wildlife," he says. But in the years since, he's down far more. "We've now gone leaps and bounds beyond the Audubon program."

Mr. Holden is the first to admit that not all has gone smoothly. He had to close down the composting area for a year when area bears began to treat it as a breakfast bar.

"The bears were becoming habituated to the compost," he says.

With the help of a park superintendent, a bear-deterring electric fence was put up around the area.

To augment the compost made on the course, Mr. Holden ships in composted poultry litter from Ontario, a mixture of bedding, straw and poultry droppings. He tries to time applications with forecasts of rain, to wash the compost into the lawn and soil.

"One time a few years back we put it on just as a beautiful warm rain was beginning. We sat back and thought this is going to be beautiful. But then the rain stopped, leaving all this gloppy, muddy stuff on the greens. Golf balls picked it up as they rolled, with a snowball effect. Golfers got it caked on their shoes in great big clumps. It was a nightmare. All we could we could do is apologize and hand out plastic bags."

Despite of a few setbacks, the course is seen as a huge success -- valued by golfers for its velvety greens and by environmentalists for its green initiatives.

While he isn't telling anyone to get red wrigglers in their home bathrooms, Mr. Holden says home owners can easily adopt some of his successes to their urban lawn care. "A home lawn is so small, it should be very easy to manage."

Here are his Top 5 lawn-care tips:

- 1. Don't expect perfection: "That dark, dark blue-green lawn is probably not very natural. Take a look around you, at the colour of the leaves and what's around your site and try to make your yard fit in. There's always going to be a weed seed that flies through the air or a bird that drops one on your lawn. Try to achieve a natural balance."
- 2. Use your nitrogen resources: Mow your lawn at a higher height. "Let the clippings fall on the lawn, returning the nitrogen to the soil." Also, instead of brown bagging yard waste, compost it, so you can return the nitrogen-rich material to your lawn (as a top dressing in spring or late fall) or dig it into flower or vegetables beds.
- 3. Fertilize intelligently: "Pick an organic fertilizer. Composted poultry litter is good because it has a low middle number, the phosphorous. Lawns use the nitrogen (first number) and potassium (third number) efficiently, but phosphorous can leach into nearby water, causing problems.

"Also, spoon feed your lawn. If it says to use so much fertilizer, divide that into four to five applications, so if you get big rain, the fertilizer won't all wash away."

Mr. Holden says that on the golf course, he also sprays with a very dilute molasses mixture after fertilizing because the sugars "excite the microbes in the soil" letting them break down the fertilizers. Dissolve molasses in warm water, then mix into a watering can or spray. Five ounces of molasses to 10 gallons of water is plenty.

- 4. Aerate: "If you can, aerate your soil because it creates little channels for air, water and nutrients to penetrate into the soil. Then fertilize after aerating. For most home lawns, even the aerating sandals will work. If your yard is very compacted, you'll want to get an aerator that pulls the plugs right out."
- 5. Use corn gluten once or twice a year: "Hand pull weeds, but once you've got them down to manageable level, use corn gluten. It's a fertilizer, but it also suppresses weed seed germination. It suppresses all seed germination, actually, so don't use it on newly seeded lawns. By fertilizing, you get some fairly vigorous growth so the grass can compete with the weeds."

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