

Golfers set their sights on this breathtaking fairway at Clear Lake Golf Course. The grass, maintained by a team led by course greens superintendent Greg Holden, is treated primarily with organic fertilizer and compost made on site.

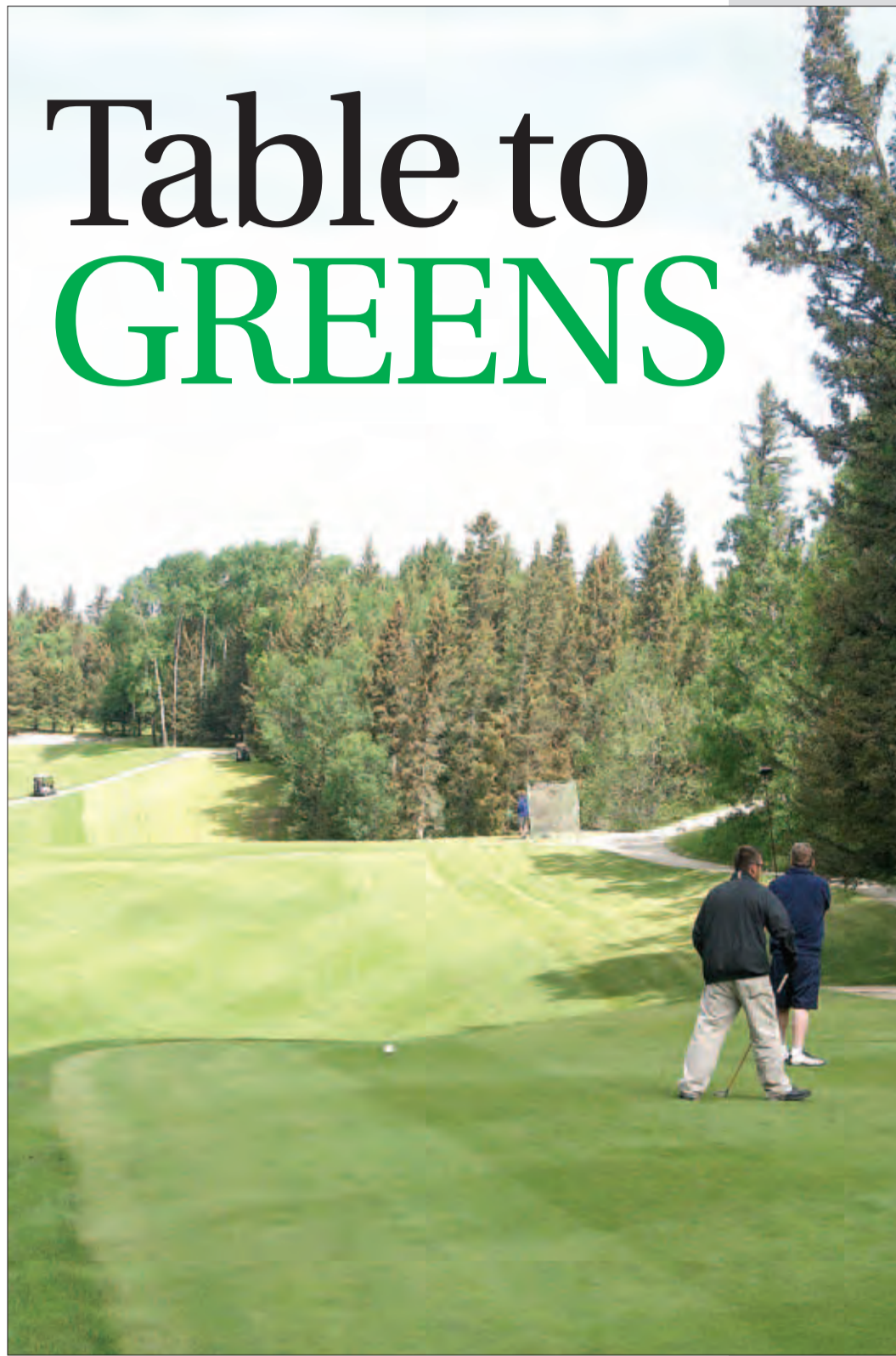


Table to GREENS

Green takes on a whole new meaning at the eco-friendly Clear Lake Golf Course where recycling and composting is the rule, right down to mulching the clubhouse restaurant remnants to sprinkle on the manicured greens and fairways.

BY JOANNE F. VILLENEUVE

RIDING MOUNTAIN NATIONAL PARK — The Clear Lake Golf Course's lush greens are a sight to see, nestled in knolls and dips, skirted by conifers, and intersected by two creeks.

Since Lydia and Ian Sarna took over the property 16 years ago, a range of environmentally friendly practices have been successfully embraced.

Because the course is with Riding Mountain National Park, there are guidelines that the Sarnas and their green team have had follow to minimize the impact on the lake and the surrounding forest.

"The mandate of the national park said to preserve and to protect for future generations. I built our proposal from there," said Ian, the course's general manager.

Recycling is just one aspect of the course's plan, and so, all cans, cardboard boxes and other byproducts are dealt with in this manner.

"Everything that we can, we recycle," said Lydia, adding that the disposable cups used on the course are biodegradable. "We're trying to look after our earth."

The environmentally-friendly approach does not stop here.

The 13,000 litres or so of waste fryer oil discarded from the clubhouse restaurant's kitchen as well as from restaurants in Clear Lake, Sandy Lake, Onanole and Erickson is gathered, brought to a processing plant and transformed into biodiesel.

"That's a perfect resource for biodiesel. So we developed a program. We have a truck and a little crane that winches the barrels of used oil onto the truck. Then we take them to be refined into biodiesel, bring it back and burn it," said Greg Holden, the course's greens superintendent who just won the 2009 Manitoba Eco-Network environmental award.

Though some of the maintenance equipment does require petrodiesel, seven machines are powered solely by the alternative, earth-friendly biofuel.

In partnership with Parks Canada, Holden has been using this new source of fuel for the past four years.

"The (exhaust) smells like French fries and the emissions are much better than (from) fossil fuel," Holden said, adding that the biofuel he uses is not created from oil seeds, a potential food source.

"This is a waste turned into a resource because it's already been used. And the thing is that it's biodegradable. So if you have a little bit of a spill, it's perfectly fine."

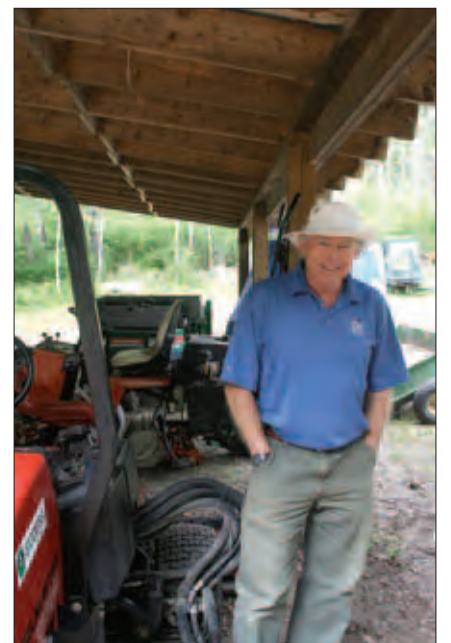
Eventually, he hopes to refine the used fryer oil on site, saving time and energy, while eliminating the drive back and forth from the Brandon refinery.

Most astounding about this golfing destination is the fact that its expanses of grass are practically chemical-free.

When broad-leaf problems arise, Holden uses natural products, like horticulture vinegar or hydrogen peroxide.

"I think it's a fantastic thing that they don't use chemicals. I don't think the course has seen any detriment from having to do that. From a playability standpoint, if you didn't tell somebody, they'd never know," said avid golfer Dale Coulter.

» See 'Even the toilets' — Page C2



THE ECO-TEAM

At left, head chef and pastry chef Ilse Mohn is on board with the recycling program at the golf course. A long standing proponent of organic and locally produced foods, she is dedicated to the golf course's environmental philosophy. At right, Lydia Sarna, one of the owners of the Clear Lake Golf Course, holds the door to the cardboard recycling shed just off the restaurant. All boxes are broken down and recycled while all vegetable and fruit waste is composted — an environmental approach she and her husband Ian introduced when they purchased the course in 1993.

Photos by Joanne F. Villeneuve/Brandon Sun

Greens superintendent Greg Holden and his team operate seven grass maintenance machines that solely use biodiesel. This organic fuel is produced in part with the cooking oil recycled from the restaurant, and subsequently, the exhaust fumes smell like french fries.



(Photos by Joanne F. Villeneuve/Brandon Sun)

TABLE TO GREENS

» Even the toilets are a composting marvel

« Continued from Page C1

“It doesn’t affect my game. That’s a testament to them. They’ve gone above and beyond.”

To coax the deep green expanses in the middle of the wilderness, Holden has a few tricks up his sleeve.

Much like the biofuel, another proactive, green method that he widely uses is the spreading of biodegradable poultry manure.

“It’s processed into very fine particles and we apply it to the very short grasses on the greens,” Holden said. “It can be very smelly, but it’s safe to use.”

Next to mounds of poultry manure in a storage shed, there are a few bags of synthetic fertilizer, which are used solely when the soil temperatures are cool, in the early spring and late fall.

A little further into the woods, tucked away from the main course is a large open space, with various piles of sand, top dressing, final mix and so on, awaiting use.

Behind a fence, one heap in particular is safeguarded from bears.

There, not only are table scraps, fruit and vegetable peelings, garden waste and other organic matter from the kitchen heaped up, but grass clippings, dead leaves and straw are added to balance out the nitrogen and carbon levels required in the composting process.

To maintain the appropriate temperature for the micro-organisms breaking down the material in the pile, staff members often turn the mixture, and this ensures the optimal levels of oxygen and moisture as well.

“In the final stage, we use the top dressing on our course or in the plant and flower beds,” said Lydia. “So this waste is not just being dumped into a garbage bag. It’s a very simple thing to do and we all should be doing this at home — giving back to the earth. We’re just doing what we set out to do. Day by day, year by year. And I think we’re making a difference.”

The top dressing is a three-way mix of sand, compost and manure, applied primarily in the fall.

Compost teas, made with worm castings and produced on site, are also used.

Meanwhile, one of the integral members of the environmental program at the course, head chef and pastry chef Ilse Mohn, is busy creating delicious dishes in the clubhouse’s kitchen.

For her part of the equation, she strives to use locally grown foods, which later supply some of the green or nitrogen-rich components in the compost.

“I have a belief in organic, healthy eating and healthy living,” she said. “In the kitchen, we use the finest ingredients and everything is fresh. We compost all our vegetable and fruit cuttings. The beauty (of the course) reassures you and locks in your belief that we’re doing the right thing here.”

To be able to provide sufficient amounts of compost-based top dressing, Holden also buys 20,000

pounds of compost per year, from a composting farm.

“We make 10,000 lbs. of our own, but we can’t make enough on site to satisfy all our needs,” he said.

Another piece of the environmental program at the course are the composting, no-flush toilets.

For more than a decade, two have been out on the course and another in the pro shop.

“We just harvested the first solids out of them last year — 10 years later. That’s how well everything breaks down,” Holden said. “They contain vermiculture worms. They digest a lot of the solids. It’s amazing. The only time you ever smell anything is if the fan quits.”

These do not require a septic tank, pumping or water, nor do they pollute the ground water.

Solar powered, the composting toilet just needs a weekly raking and the addition of wood shavings.

American environmental advocate Abby Rockefeller introduced the

● At top, the view from the Club House Restaurant at the Clear Lake Golf Course — rolling knolls, Adirondak chairs waiting and the ninth hole.



Clockwise from above:

● A wooden carving of a pelican stands guard over one of the two streams that meander through the course. The composting and recycling team’s efforts ensure that the water is not compromised by chemicals.

● Greens superintendent Greg Holden pumps biodiesel to demonstrate its inoffensive smell — that of linseed oil. This recycled product uses the waste cooking oil from the restaurant as well as from other local venues.

● Lydia Sarna, one of the course owners, checks the recycling and composting bins just outside the restaurant’s kitchen.

● Three piles of compost stand ready to be used in flower beds and on the golf course.



Swedish composting toilet or Clivus Multrum to North America.

It is her company’s product that is found at the Clear Lake Golf Course.

She has visited the site, and in an email message commented on the integration of the composting toilets there.

“I was delighted by Greg Holden’s work at Clear Lake. He’s really applying concepts from organic farming to golf course management,” she wrote. “Of course, the compost toilet fits in perfectly with this idea. Nutrient recycling — that is, the recycling of nutrients that have been kept out of the sewer and are, therefore, free of industrial toxics — is what we need to be doing everywhere.”

Finally, getting around from one hole to the next can be done on one of the course’s fleet of electric carts.

“Every year, we try to do something new, and not just organically, but in every way. It all fits together. One (practice) complements the other,” Holden said. “It works out very well

and we get closer to what we think is a good system.”

Golfer Claire Williamson has long played this course and has witnessed the progression of the green approach.

“I think it’s a very commendable undertaking. It didn’t happen overnight. A lot of effort and thought have been put into it,” he said. “It’s been worth it.”

Though this way of maintaining a golf course demands more manpower, there are definitely few environmental concerns.

“We’re quite happy with the methods that they’re using. I think it’s a great improvement over conventional methods in terms of environmental protection,” said Cam McKillop, an environmental assessment scientist who works at Riding Mountain National Park.

“And we’re happy to see that Clear Lake Golf Course is providing leadership in that field.”

» jvilleneuve@brandonsun.com