

# He plugs his lawnmower into the sun

**BY CHRISTOPHER COUSINS**  
*Times Record Staff*

## WOOLWICH

The grass is always greener on the underside of Guy Marsden's lawn mower.

It's greener because it was cut by a Green Mower, and we're not talking colors here.

The mower, which Marsden designed and built himself, is powered by nothing but the sun.

"It sounds like a big box fan, don't you think?" Marsden asked recently, demonstrating the machine on his shaggy lawn. "One of the best things about it is that it's quiet."

And it is. It doesn't look like a lawn mower, smell like a

lawnmower or sound like a lawnmower.

But it sure cuts grass like one.

"It surprised the heck out of me, frankly," said Marsden, who refers to himself as a "math-impaired" self-taught electrical engineer. "It goes just as good as the five-horse-power gasoline engine."

Quite a novel idea, but how does it do in the taller stuff?

"I'll show you," said the lanky, bearded 50-year-old who sports a pony-tail and round-rimmed spectacles.

While showing off his invention recently, Marsden veered the machine toward higher roughage at a moder-



JENNIFER PURINGTON / THE TIMES RECORD

**GUY MARSDEN** pushes the solar-powered lawn mower he invented. The solar panels, seen on the right outside his workshop in Woolwich, collect energy from the sun and then transfer it through a cord to the battery of the lawn mower.

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# SUN

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ate pace and didn't slow down when he got there. The motor slowed a bit as the blade chewed through, but the result was as good as you could expect — shorter grass. And he used no fuel except for what shone down from the sun.

Three solar panels mounted on the roof of his shed are wired to a charge controller box — which he bought on eBay — that is inside the shed. An old computer power cord connects it all to the mower, charging a 12-volt battery mounted atop the mower deck.

In good weather, the battery charges in about three to four days and can power the mower for up to 40 minutes. Running a gas mower for 30 minutes produces as much pollution as a car driving 150 miles, he said.

“I know I come across like a rabid ‘Greeny,’ but I’m not,” he said. “I’m a sensible ‘Greeny.’”

Marsden and his wife try to curb their energy use wherever they can. They drive a low-emission hybrid/electric car and his shop is kept warm with solar-powered radiant heat. The hydronic solar panels that heat the shop are mounted right next to photovoltaic solar panels that charge the mower.

In winter, Marsden uses the photo-voltaic panels to run circulator pumps for the heating system.

The mower's gas engine — which didn't work anyway — is discarded in a crooked kilter in an area of dirt and weeds, earmarked for the dump.

“It's morally offensive to me on a certain level to be burning gas like that,” said Marsden, whose exploits have taken him everywhere from a “Star Trek” movie set to inventing electrical gizmos for inventors throughout the country and around the world.

“We're running out of oil and we need to make people conscious of alternative energy choices,” he said.

To do his part, Marsden has posted detailed instructions on his Web site about how to convert a gasoline mower to solar power. The information can be found at [www.arttec.net/Solar\\_Mower](http://www.arttec.net/Solar_Mower).