Daylight Saving Time does not save energy

by Gail Bambrick, Tufts University

With the switchover to daylight saving time just around the corner, you might wonder why we go to the trouble of springing forward and falling backward every year.

It turns out that more daylight gives us more time to shop, drive, grill and perfect our golf game. What it doesn't do is cut our energy use, as is the intent, says Michael Downing, a lecturer in English and author of Spring Forward: The Annual Madness of Daylight Saving Time.

In fact, when we lose an hour's sleep at 2 a.m. on March 9—beginning the eight-month DST season—it will not reduce our electricity use even by one half of 1 percent, says Downing, contrary to the most recent study by the Department of Energy.

While the government continues to claim that the country reduces electricity use for each day during DST, Downing says we come nowhere near that. Some studies do report small reductions in electricity use, but the most comprehensive study of household energy demand and many others report an increase in overall energy consumption ranging from 1 to 4 percent during DST.

"The barbeque grill and charcoal industries say they gain $200 million in sales with an extra month of daylight saving—and they were among the biggest lobbies in favor of extending DST from six to seven months in 1986," he says. Lobbying alongside them that year was the golf industry, which says that additional month of daylight has meant more time on the links and an additional $400 million in revenue.

But what's good for retail is bad for overall energy use, says Downing. "If it's light when we leave work and we decide to go to the mall or a restaurant or head for a summer night at the beach, we don't walk there; we get in our cars," he says.

Gas consumption goes up during daylight saving time—"something the gas industry has known since the 1930s," Downing says. That's why it lobbied hard to reintroduce DST after two short-term experiments with it to conserve electricity and other energy resources during World Wars I and II.

But more driving also means more carbon dioxide in the atmosphere, which exacerbates climate change, says Downing. Moreover, the reduced cost of indoor lighting on sunny spring and summer afternoons is offset by higher air-conditioning costs at offices, factories and shopping malls.
"Every time the government studies [DST], it turns out that we are really saving nothing when all is said and done," Downing says.

And yet, at the urging of many industry lobbies, the government has extended the duration of DST several times. In 1966, President Lyndon B. Johnson signed the Uniform Time Act, which instituted daylight saving time, beginning on the last Sunday of April and ending the last Sunday of October—six months in all. This act standardized customs that varied from state to state between 1945 and 1966.

Then in 1986, the federal law was amended to add a full month to DST, making it begin the first, not the last, Sunday in April. "This change was spurred by a large number of lobbies: golf and golf equipment, home improvement, the Hearth, Patio and Barbecue Association and the gas and fuel industries, which saw a potential boon to their sales," Downing says. "There was little concern for those living in western parts of each time zone, where sunrise could be as late as 8:30 a.m. some months."

"This standardized time change was no favor to farmers, who now had an hour less of morning light to milk their cows and get their goods ready for market, let alone for commuters or children waiting for school buses in the dark," he says.

In 2005, seven months of DST became eight with the passage of the Energy Policy Act, which moved the start date to the second Sunday of March and ended it a week later, on the first Sunday in November. The change from the end of October to early November was not driven by energy savings, but by the National Association of Convenience Stores (NACS), who wanted Halloween to occur during DST.

"It gave the children more time to trick or treat and eat more candy," Downing says. Of course, in addition to Snickers bars, Americans buy 80 percent of their gasoline at convenience stores, and the NACS credits that extra month of daylight saving with a $1 billion increase in annual sales.

"So today we have eight months of daylight saving and only four months of standard time," he says. "Can you tell me which time is the standard?"

Commercial upsides aside, Downing offers that daylight saving time does do something good for the soul: "It may be based on a myth of energy saving, but who wants to give up enjoying those long, warm summer nights?"

Provided by Tufts University