BONUS

For Carbon Offset, Look No Further Than Your Own Backyard

Finally, here's proof that properly maintaining a healthy lawn is good for the environment.

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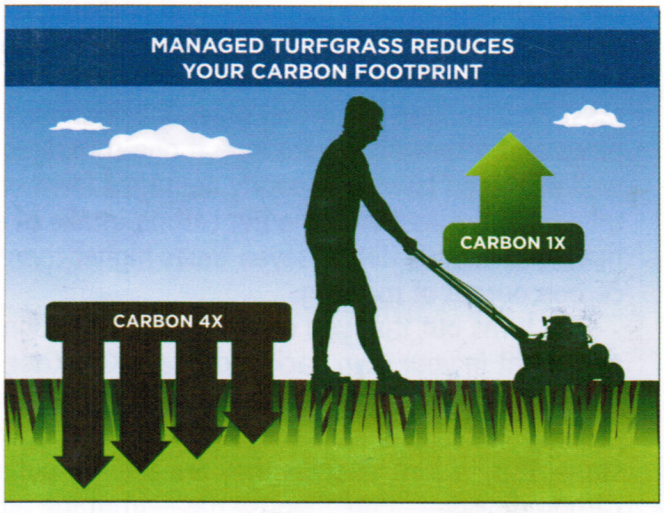
Corporations and shoppers in the United States spent more than $54 million in 2007 on carbon offset credits toward tree planting, wind farms, solar plants and other projects to balance emissions, according to a *New York Times* report in January 2008. While consumers scramble to find a way to reduce their carbon footprint, many homeowners overlook a carbon offset right in their own backyard.

Three times more acres of lawns exist than any irrigated crop* in the U.S. And, within all of these lawns, the basic principles of photosynthesis and respiration are taking place—plants taking carbon dioxide from the atmosphere and storing it in the soil. Unlike cropland that is turned over each year, most backyard lawns are left undisturbed, allowing roots to grow deeper and lock away relatively large amounts of carbon.



But as any good home gardener knows, plants grow faster and better when pruned, fertilized and watered responsibly. For turfgrass, this means mowing regularly to the proper height to encourage healthy growth. But, wait a minute. Doesn't a mower emit carbon?

The Outdoor Power Equipment Institute (OPEI) recently set out to unravel the question. In early 2008, OPEI asked Dr. Ranajit Sahu, an independent environmental and energy expert, to conduct a study of existing literature to assess the carbon benefit of well-managed turfgrass.

Well-managed backyard lawns mean those that are cut regularly to the appropriate height, fed with nutrients such as leaving grass clippings, watered in a responsible way and not disturbed at the root zone.

The report, titled "Technical Assessment of the Carbon Sequestration Potential of Managed Turfgrass in the United States" led to some surprising results. "We were unsure about the study's outcome, but existing data shows that a net carbon benefit exists from well-managed turfgrass such as the typical American lawn," says Dr. Sahu who reviewed existing data to determine the carbon sequestered (or stored) by turfgrass, such as household lawns, golf courses and sports fields, as well as wild grassland systems. "When you take care of your lawn and promote a healthy root system, your lawn acts as a carbon sink, pulling and storing away carbon."

As a matter of fact, Dr. Sahu's study showed that turfgrass can capture up to four times more carbon from the air than is produced by the engine of today's lawnmowers. The largest amount of carbon intake occurs with the recycling of nitrogen contained in grass clippings. So, by all means, leave those clippings on the ground to break down and recycle.

But, don't sit back, relax and let lawns go to seed. According to Dr. Sahu, the key is to actively manage your lawn to improve its carbon intake and not letting it go into a "dormant state."

So, with the high price of gas keeping many of us home, you can now look out on your lawn with a little more pride. All it needs is a little "TLC."

**A Strategy for Mapping and Modeling the Ecological Effects of US Lawns, C. Milesi, et al., using satellite data and GIS mapping techniques.*

This section of *Turf News* magazine is devoted to providing turf producers with information of immediate use to landscape contractor customers and their customers. Feel free to photocopy and pass it along.

For more information about the benefits of turfgrass, visit www.TurfGrassSod.org

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