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## Trial by Fire

The Carbon Footprint of Barbecue

Johnson, E. 2009. Charcoal versus LPG grilling: A carbon-footprint comparison. *Environmental Impact Assessment Review* DOI:10.1016/j.eiar.2009.02.004.



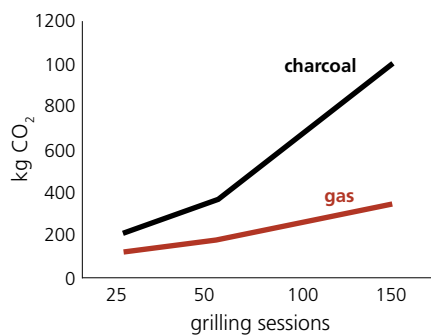
**Who says science is no picnic?** To assess the carbon footprint of barbecues, Eric Johnson rounded up eight volunteer grillers (including himself) and held the equivalent of 50 cookouts.

The researchers used both gas and charcoal grills and kept tabs on their fuel usage, the length of time they grilled, and the amount of food they cooked. Johnson, of Atlantic Consulting in Gattikon, Switzerland, then

included those numbers into a life-cycle analysis of each grill type.

In the end, charcoal turned out to have a far-higher carbon footprint than gas. The researchers concluded that charcoal grilling sessions typically carry a footprint of 6.7 kilograms—roughly the same as driving a car 35 kilometers. Gas grilling, by contrast, produces just 2.3 kilograms of CO<sub>2</sub> per session.

One key reason for the disparity: producing charcoal is a carbon-intensive proposition that involves harvesting wood and heating it to 300 to 500 degrees Celsius. Also, charcoal grillers typically use the same amount of fuel, no matter what they're cooking, while it's easier to vary the fuel output of gas grills. 🐝



—Justin Matlick



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## Much Abuzz about Nothing?

Fears of global bee decline may be unfounded

Aizen, M.A. and L.D. Harder. 2009. The global stock of domesticated honey bees is growing slower than agricultural demand for pollination. *Current Biology* 19(11):915-918.

**Reports of bee colony** losses in the U.S. and Europe have triggered fears of a worldwide “pollination crisis.” A new study in *Current Biology* suggests the decline might not be so widespread after all.

Bees are needed to pollinate certain crops, and some fear that a global slump in bee numbers could bode ill for the world’s food supply. But when a research team analyzed data from the United Nations, they found that the number of commercial honey-bee colonies worldwide actually increased by about 45 percent from 1961 to 2007. While colony numbers have been dropping in the U.S. and some parts of Europe, other countries have made up for those losses.

On the downside, the number of crops that require pollination rose from 3.6 to 6.1 percent between 1961 and 2006. That skyrocketing demand may be straining the world’s bee colonies. Wild and feral bees are likely helping to satisfy the pollination demand for now, but this “service” could be in danger if the spread of agriculture wipes out neighboring habitats. 🐝

—Roberta Kwok

