



You might call it the perfect economic storm. As I write this, a barrel of crude oil is selling for more than \$140, and gasoline prices in most parts of the country have shot above \$4 a gallon. The high cost of energy is driving up the cost to produce and transport most consumer goods, not the least of which is food. Prices at the supermarket are also being influenced by food shortages that are due, at least in part, to rising demand from the world's growing population and emerging economies, weather-related crop failures, and the diversion of some food and feed crops—such as corn in the United States—for the production of ethanol and other biofuels.

There are no quick fixes to the world's energy crisis, nor will we solve food shortages and hunger overnight. But most experts agree that if we are to replace a significant amount of petroleum with renewable and cleaner-burning biofuels—while maintaining and increasing our food supply—we must develop energy feedstocks that don't rob land and other resources from food and feed production. In "Fueling a Hungry World," you'll learn about research in the college aimed at doing just that.

In the short term, though, many people are struggling to make ends meet as energy and food prices skyrocket. "Helping Families on the Edge" highlights Penn State Cooperative Extension programs designed to empower families to manage and stretch their household budgets and survive economic downturns without sacrificing good nutrition or home comforts.

Regardless of financial conditions, we're constantly exploring avenues for increasing the quantity and efficiency of food production, and that often requires a thorough understanding of animal reproductive processes (think milk and eggs). As you'll read in "It Takes More than Two," a new group of scientists in the college has adopted a team approach to reproductive-biology research that could enhance food production and lead to breakthroughs in human fertility.

In this issue, we also bring you an update on the college's research to find the cause or causes of Colony Collapse Disorder—the mysterious ailment that has decimated the nation's honey bees—and tell you about a few companies and individuals who have contributed financially to that effort. In addition, you'll read about extension educators who are assisting landowners in dealing with Pennsylvania's natural-gas boom, a plant scientist who "chips" in to help potato growers, a group of students whose study of soils and civilizations took them to the Middle East's Fertile Crescent, and much more.

We welcome your comments about *Penn State Agriculture*. Write to Editor, *Penn State Agriculture*, The Pennsylvania State University, 134 Agricultural Administration Building, University Park, PA 16802, or send e-mail to psuagscinews@psu.edu or to me at RSteele@psu.edu. You also can find the magazine on the Web at aginfo.psu.edu/psa.

A handwritten signature in cursive script that reads "Robert D. Steele".

Robert D. Steele
Dean