

# Drive Your Car and Starve! U.S. Corn Belt Shifts to Ethanol

by Marcia Merry Baker

There are drastic agriculture shifts associated with the rising biofuels bubble, in particular corn for ethanol, as the accompanying figures show. The gasoline used by one SUV with a 25-gallon tank, for one year, is equivalent to the grain needed to sustain one person for one year, estimates Lester Brown, the founder and spokesman for Worldwatch Institute. Not to worry, says this green globalist outfit, based in Washington, D.C. Brown recommends that we radically reduce population and switch to low-tech wind power! Although Brown is dead wrong on the "solution," it is true that there is a food-fuel tradeoff.

As of the 2006 current crop year, the volume of U.S. corn going into ethanol is expected to be 20% of the entire corn harvest, the largest percentage ever. Before 2000, it was less than 3%. Next year, it might rise to more than 25% of total annual corn production, according to Keith Collins, chief economist of the U.S. Department of Agriculture.

This corn flow is feeding some 101 ethanol bio-refineries now in production. The locations are shown in **Figure 1**, which also shows 42 more refineries under construction. In

addition, there are another 60 in the talking stage.

These distilleries are concentrated in the Corn Belt counties, shown in **Figure 2**. At the center of it all is Iowa, the nation's top corn growing state. If and when all 55 bio-refineries now planned or operating are up and running, the *entire annual corn crop of Iowa could be utilized for ethanol*, instead of for livestock feed or food, according to the calculations of Iowa State University economist Bob Wisner.

The immediate effect of such a tradeoff of ethanol for fuel, not food, is that U.S. exports must be cut, according to forecasts by the U.S. Department of Agriculture. **Figure 3**, the "USDA Baseline Projections to 2015," shows that corn for fuel ethanol will grow consistently, whereas other uses of corn will not. Corn exports are likewise depicted as stable or rising, but since this forecast was done in April, USDA economist Collins has altered the projection to say exports will fall.

Collins gave this news to the U.S. Senate on Sept. 6, at a hearing on renewable fuels. Collins also said that Brazil and Argentina should be expected to take the place of the United States as the source of corn exports. This is a wildly offhand statement, given that U.S. corn exports account for 60 to 70% of the total volume of corn traded worldwide each year. At present, about 20% of the U.S. corn crop is exported. The largest importers of U.S. corn are Japan, South Korea, and Mexico, but many other countries also rely on U.S. supplies, including Russia. Under the North American Free Trade Agreement (NAFTA), Mexico was ordered, in effect, by global cartel interests to become dependent on U.S.-produced corn. Now, the order is to "shop elsewhere."

Moreover, there are rumors that the U.S. boom in ethanol distilleries will suck in feedstocks from abroad, such as raw sugar

FIGURE 1  
U.S. Ethanol Biorefinery Locations

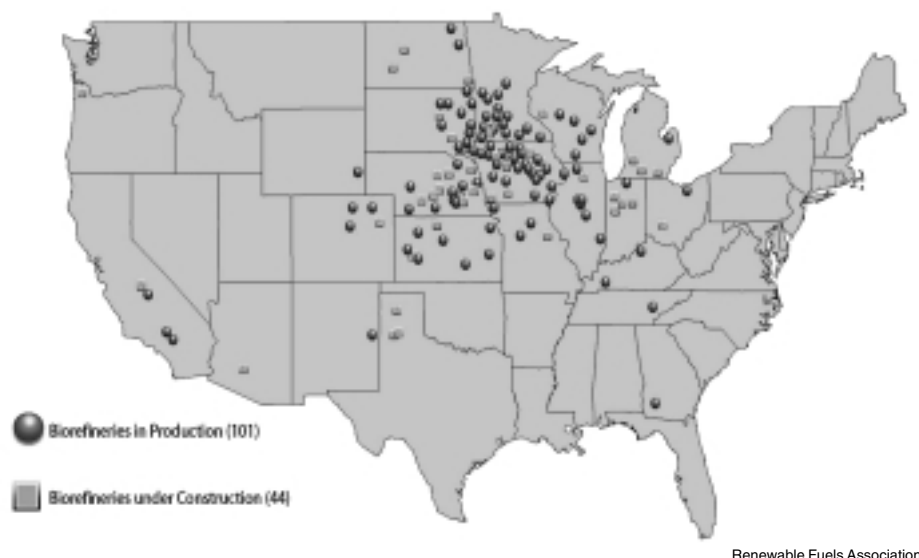


FIGURE 2  
**U.S. Corn Belt**

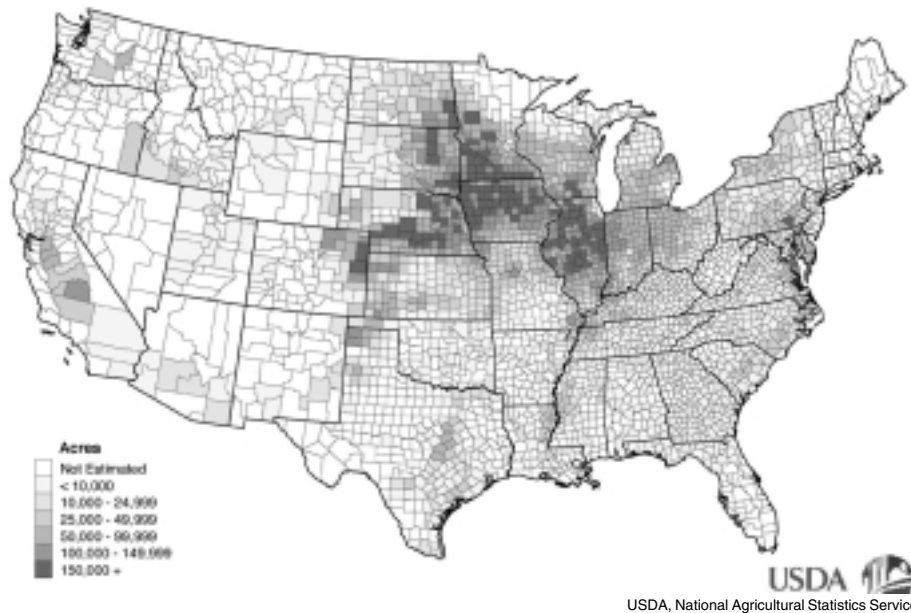
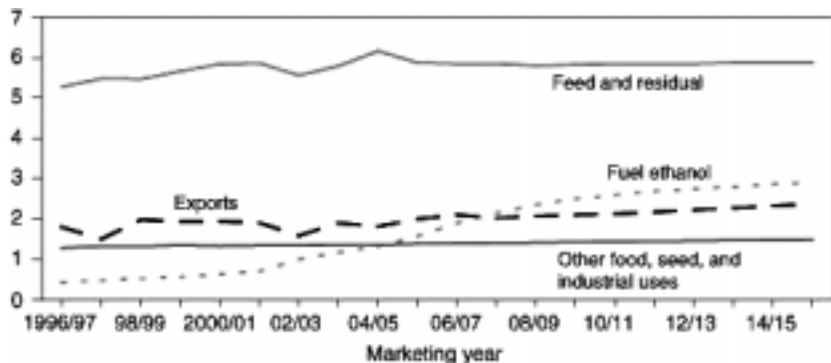


FIGURE 3  
**USDA's Baseline Projections Suggest That Corn Use by Ethanol Producers Will Grow Much Faster Than Corn Use by Other Industries**



USDA Agricultural Baseline Projections to 2015

from the Caribbean.

There are other trade-off situations at key links in the food chain around the globe, for example, in Malaysia. Under free trade, Southeast Asian this nation has become the leading export source for palm oil, as well as relying on it heavily for domestic consumption. But now, so much palm oil is lined up for bio-diesel production, most intended for marketing in Europe, that there is a trade-off of palm land for production for food consumption. There are 52 new palm oil refineries under discussion for Malaysia. The leader of the pack is Cargill Palm Products Sdn Bhd.

In the U.S., the USDA “value-free” scenario for meeting feedstocks for biofuels, according to Collins’ report to the Senate, is that, although corn yields may go up a bit, more U.S. land needs to be cropped for ethanol. Corn acreage could rise to “90 million acres in 2010 . . . nearly 10 million more than the average planted during 2005 and 2006,” Collins said. He proposed that farmers could start corn growing on land now in the Conservation Reserve Program (CRP), which was set up to nominally protect the environment (by not growing row crops). The USDA has done a study to estimate that “4.3 to 7.2 million acres currently enrolled in the CRP could be used to grow corn or soybeans in a sustainable way,” he said. Furthermore, Collins pointed out that, as corn commands higher prices because of pressure from ethanol use, then “land must be bid into corn production and away from other crops.” Thus, more shifts in the food chain.

Biodiesel production, reliant mostly on soybeans or other oil crops, involves the same fuel-food trade-off dynamic. About 76 biodiesel plants are operating commercially in the United States, along with dozens around the world, and dozens more under discussion. U.S. production in 2005 was 75 million gallons, which seems like nothing in the context of 140 billion gallons of gasoline consumed per year, but the rate of growth in output—it tripled from 2004 to 2005—is “phenomenal, almost frightening,” in the words of the CEO of the National Biodiesel Board, Joe Jobe.

And the financial stampede is also huge, as it is with ethanol. Cargill and ADM are investing heavily into biodiesel, as are Chevron and BP. Vulcan Capital, led by Paul G. Allen, the co-founder of Microsoft, put \$10 million into Seattle Biodiesel, which recently changed its name to Imperium Renewables. The company now produces only 10 million gallons a year, but is building a refinery in Grays Harbor, Washington, to be able to produce 100 million gallons a year. Imperium now procures soybeans from the Midwest, but intends to command local sources soon. Once again, food crops are to be displaced.