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The Wages of Food Factories¹

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The goal of modern, industrial agriculture has become the production of large quantities of uniform products at the cheapest price. Emblematic of these trends, and in many ways responsible for them, is the meat and poultry industry, which has led American agribusiness's headlong plunge into vertical integration and contract farming. Through restructuring, it has managed to externalize many of its costs and impose them on job-hungry small towns in the Midwest and South. The meat and poultry industry, and the food factories that produce and process its products, impose needless harm on animals, land, workers, and communities. This article examines the consequences of industrial food production and processing and suggests possible public policies and actions to mitigate the harmful effects of food factories.

*Men's negligence and their
fatuous ignorance and abuse
have made a hardship of this earth. . . .
because of our history's wages,
bad work left behind us,
demanding to be done again.*

Wendell Berry, "The Wages of History," from *Farming: A Handbook*,
1967

FROM THE FAMILY FARM. . .

The family farm is one of the defining myths of the American people, and once upon a time most of us actually lived on one. In 1820 agriculture

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accounted for 72 percent of America's workers (Mills 1995:105). Even as late as 1900, 41 percent of the American workforce was still employed in agriculture, which was powered then by humans and animals (Dimitri, Effland, and Neilson 2005:2–3). But in a single generation—from the end of World War I to the beginning of the Korean War—farming mutated. The tractor replaced the mule, the pickup supplanted the wagon, dirt and gravel roads were covered in blacktop. As machinery took the place of family and neighbors in the fields, hybrid crops, chemical fertilizers, insecticides and herbicides increased yields (van Willigen and van Willigen 2006).

New technologies and purchased inputs required less manpower, but they also demanded larger capital investments, which in turn needed larger farms to maximize productivity. Small, largely self-sufficient farms, relying on a mixture of crops, livestock, and wild foods, gave way to highly mechanized and highly capitalized large ones, producing a limited range of crops for commodity markets—falling from an average of five at the beginning of the 20th century to only one at the beginning of the 21st (Dimitri, Effland, and Neilson 2005:2). In the process, control of our food system shifted from independent farms to highly concentrated and vertically integrated agribusinesses, and agriculture became an industry, manufacturing food, fiber, and fuel (Grey 2000a:145).

The second half of the 20th century saw the number of farms in the United States fall from 5.5 million to less than 2 million (National Agricultural Statistics Service 2003). Paradoxically, total acreage devoted to major crops remained relatively constant, as farm size increased and acreage under cultivation per farm more than doubled. Industrialized agriculture has delivered on its promise of more and cheaper food, but it has also driven down commodity prices and farm incomes. Over the past decade, net farm income has fallen sharply, even as government subsidies have nearly tripled (Institute for Agriculture and Trade Policy 2007:7). Nine out of every ten farm households now have off-farm earnings, and the average farm family gets 82 percent of its income from such sources (Dimitri, Effland, and Neilson 2005:3; Grunwald 2007).

As American agriculture has transformed from a way of life into an industry, Americans have abandoned the countryside for jobs in town. Less than 2 percent of employed Americans still work on farms and ranches (Dimitri, Effland, and Neilson 2005:2). Even so, 16 percent live in rural areas (Economic Research Service 2009), and many rural communities have sought to combat job loss and population decline through economic development strategies designed to add value to raw agricultural products by attracting food processing plants. In Kansas and Nebraska it has been beef; in Iowa and North Carolina pork; in Maryland and Kentucky poultry.

The food system is like an hourglass—agricultural commodities produced on thousands of farms and ranches are processed by a handful of companies before they are sold to millions of eaters in this country and

around the world. Over the past four decades, a handful of multinational corporations—Cargill, ConAgra, Tyson, Smithfield, Kraft—came to dominate food processing through restructuring and vertical and horizontal integration. Attracted by the absence of protective zoning in much of rural North America, food manufacturing has pursued its corporate interests at the expense of the health and well-being of workers, local citizens, and the environment. Such companies are difficult to influence and regulate, and the communities that host their plants are reluctant to challenge their environmental and labor practices because they represent major sources of employment and revenue (Stull and Broadway 2004).

...TO THE FACTORY FARM

Americans generally agree on the need to preserve both the environment and the family farm. But as agribusiness has industrialized food production, farms have come to look more and more like factories. And farmers, who are increasingly forced into contracts with multinational corporations that demand they adopt factory-like methods, more and more resemble factory workers.

Commonly called “factory farms” by their critics, confined animal feeding operations, or CAFOs, epitomize “food manufacturing.” CAFOs are now integral to beef, pork, and poultry production. Such operations were pioneered in the poultry industry, which has been the drum major for American agriculture’s march toward food manufacturing. By the 1950s, poultry companies contracted with farmers to raise their birds, and in a remarkably short time, companies such as Perdue and Tyson achieved total vertical integration, controlling every facet of production from egg to plate. Pork production has come the farthest in replicating the poultry industry, which serves as an exemplar for beef and grain production as well.

While the number of hogs produced by American farmers remained relatively constant throughout the 20th century, the number of hog farmers did not. From over 1 million in 1965, the number of hog farmers in the United States plummeted to one-tenth that number in 2000 (Thu 2009:15). At the same time swine production was being concentrated in the hands of a few large producers. By the end of the 20th century, one in four hogs was produced by ten companies and seven of every ten was being grown under contract (Grey 2000b:169). Agricultural economists, state economic development agencies, chambers of commerce, and agribusiness firms touted the economic benefits of large-scale and contract pork production. But studies in Missouri show corporate contract swine production actually displaces three independent hog farmers for each job it creates (Ikerd 1998:163).

CAFOs, which birth and grow out chickens and hogs in large metal buildings and finish cattle in massive feedlots, are stinking up rural America.

In the process they create serious environmental and health problems. Each day, feedlot steers eat about 30 pounds of feed and produce about 27 pounds of waste. A single broiler house produces as much as 200 tons of chicken litter annually. The average hog produces 3,000 pounds of solid manure and over 5,000 gallons of liquid manure each year—2.5 times that of the average human (Stull and Broadway 2004:31,58,134). All that waste must go somewhere. Someday it may be converted into an alternative power supply (Brown 2007), but for now virtually all of it gets sprayed or spread on cropland as fertilizer.

Studies have consistently found that up to 30 percent of swine confinement workers experience occupationally related health problems, especially respiratory problems. More than a decade of matched control studies show that persons living near hog CAFOs suffer ailments similar to those who work in those facilities. They also experience elevated rates of nausea, diarrhea, headaches, as well as depression, anger, and fatigue (Thu 2002). In North Carolina, hog CAFOs have been built in poor and African American rural communities, which already suffer from inadequate housing, poor nutrition, and limited access to health care (Wing et al. 2008:1391). Ladd and Edward (2002) have labeled such placement environmental injustice; local residents have been more forceful, calling it environmental racism (Wing et al. 2008:1391). Whatever the label, these facilities have produced adverse health and socioeconomic impacts (Ladd and Edward 2002) and lowered property values (Palmquist, Roka, and Vakina 1997).

CAFOs foul the air for workers and neighbors alike. But their harmful effects do not stop there. Antimicrobials are used to promote animal weight gain and protect against infections likely to result from confinement. Many of these antibiotics are identical or closely related to important human medicines, and mounting scientific evidence points to an association between overuse of antibiotics in animal agriculture and antibiotic resistance in humans (Government Accounting Office 2004). As much as three-fourths of the antimicrobial agents given to confined livestock and poultry are excreted, thereby entering the environment as organic fertilizer which may contaminate water supplies through runoff and infiltration. The impact of antimicrobials on the environment is not fully understood, but recent studies indicate that they may combine with bacterial organisms in the environment to contaminate the food chain (Campagnolo et al. 2002:90).

STUDYING THE MEAT AND POULTRY INDUSTRY

In the early 1980s, two massive beef plants opened on the outskirts of Garden City, Kansas, which became the fastest growing community in the state during that decade. Most of those who came to work in these plants were refugees from Southeast Asia and immigrants from Mexico and Central

America. From the summer of 1987 till early in 1990, we were members of a research team charged with investigating changing ethnic relations in Garden City, as part of the Ford Foundation's national study of the so-called new immigration (see Lamphere 1992). We soon realized that to comprehend the social processes we were witnessing, we had to understand the beef industry itself. And we wondered whether Garden City's experience was being replicated in other packinghouse towns. We decided to find out.

Since Garden City we have conducted field research on the meat and poultry industry's impact on host communities, workers, producers, and the environment elsewhere in Kansas, and in Nebraska, Oklahoma, Iowa, Kentucky, Canada, and the United Kingdom. Our research combines the methods and insights of cultural anthropology and social geography. We favor longitudinal analysis of selected sites using long-term participant observation, in-depth interviews, and extensive review of pertinent documents. *Slaughterhouse Blues* (Stull and Broadway 2004) provides an overview of our two decades of research on the meat and poultry industry and presents in depth the methods and findings from several of our studies.

Our ethnography of Garden City, originally intended to explore ethnic relations between native-born Kansans and new-immigrant Mexicans and Vietnamese, has become an extended natural experiment, evolving into an ethnology of the meat and poultry industry and its impact on host communities, processing workers, and producers. While we hope our work has made significant scholarly contributions (see, for example, Stull 1990; Stull, Broadway, and Griffith 1995; and Stull and Broadway 2004), we believe its greatest value has been to inform communities of the consequences of hosting a meat or poultry plant and help them prepare for and mitigate its impact. To that end we have consulted with and provided technical assistance to a number of communities in the United States and Canada.

Our research and technical assistance have taught us much about the impacts of meatpacking plants and what local communities can and should do about them. Our efforts in such communities have also taught us just how powerful are the forces at play in these settings and how difficult it is to influence, let alone offset, them. (For a detailed discussion of the most likely consequences, the responses we have recommended to address them, and how they have played out in several communities, see Stull and Broadway 2004: Chapter 8.)

MANUFACTURING MEAT

Modern industrial agriculture owes its production model to the chicken, and it is to the slaughterhouse, not the Model T, that the modern factory should look for its origins. Beginning in the 1960s, packinghouses fled the stockyard districts of Chicago, Kansas City, and other midwestern cities for

the countryside, where they could cut their transportation and labor costs. Drawn by mild climates, ample supplies of feed grains and water, lack of zoning and environmental regulation, antipathy toward unions, slumping economies, and lucrative tax incentives, meatpacking and poultry processing fled to the Great Plains and Southeast, where they accounted for much of the rural manufacturing job growth during the 1980s and 1990s.

These new meat and poultry plants have proved a mixed blessing. They have brought work to job-hungry communities from the panhandles of Texas and Oklahoma to the Eastern Shore of Maryland and Delaware; from the windswept high plains of Kansas to the sultry lowlands of North Carolina. But jobs on killfloors and processing lines are filled, more often than not, by newcomers to the towns that eagerly vie for these meat factories, and they bring with them unanticipated social and economic costs: rapid growth; increases in population mobility, language and cultural diversity; housing shortages; soaring rates of crime, alcohol and drug problems, and sexually transmitted diseases. Accompanying these problems are increases in demand for health care, public safety, education, and indigent care (Stull and Broadway 2004).

There is a clear linkage between meatpacking's work environment and its recruiting practices, which target the unskilled and immigrants. Low wages and dangerous working conditions encourage turnover, which averages 5–9 percent per month, or more, and produces a steady flow of new immigrants in and out of host communities, exacerbating social problems. We have no magic bullets, and our efforts to provide communities with assistance about what to expect when a packing plant opens and how to address the accompanying social and economic impacts have met with limited success. For example, in the fall of 1996 we organized a series of forums in Brooks, Alberta, designed to educate community leaders and service providers about how to prepare for the fallout from IBP's purchase of a local packinghouse and its expansion to a workforce of 2,500. Our description of what happened when packing plants opened in Garden City, Kansas, and Lexington, Nebraska, was met with a mixture of fear and outright skepticism. The editor of the local newspaper went so far as to question whether IBP would even open the plant, despite spending over a \$100 million (Canadian) on its expansion.

As we predicted, Brooks followed the same route as its packinghouse cousins south of the border. The plant initially targeted young single males in the immediate vicinity of Brooks, then broadened its recruitment to include other towns in southeastern Alberta. Once this supply was exhausted, the company recruited nationally, targeting areas of high unemployment in Atlantic Canada. After that, IBP began working with local immigrant and refugee aid societies to find workers. In the process, Brooks was transformed into a multicultural community where over 100 different languages and dialects are spoken.

The city fathers resisted our recommendation to disperse newcomer housing throughout the town and avoid the ghettoization of plant workers and their families that had occurred in Garden City, where one trailer court grew to accommodate nearly a tenth of the town's 25,000 population. Instead, the city's leaders preferred to see the company provide on-site housing for newcomers. Under this arrangement, workers had their rent and meals deducted from their paychecks, along with other expenses such as equipment purchases. The result: after working for two weeks, some employees took home just \$25. Eventually, soaring rental and home sale prices attracted private developers, who constructed new homes and apartments, and older units eventually filtered down to the newcomers.

In Garden City and Lexington, the influx of indigents looking for work meant an increased demand for temporary shelter and food assistance. We warned Brooks to expect the same. A year after the plant became fully operational, a community food bank was established in Brooks—the bulk of its clients came from IBP. One-time transitional assistance payments (for food and shelter) from the provincial government's Family and Social Services agency skyrocketed 820 percent between 1996 and 1999 and the number of transients increased by 300 percent (Broadway 2001:47).

In 1996 it was impossible to predict which immigrant groups would provide the bulk of the plant's labor force. Most newcomers turned out to be refugees from the Sudan and Ethiopia. Schools have been on the front lines in providing services to these newcomers. Demand for English as a Second Language instruction has soared, but communicating with parents has proven difficult for the schools. Many newcomers lack basic knowledge of English, and some are illiterate in their own language, so sending a note home to parents written in English serves little purpose. Our initial recommendation to translate communications into the major refugee languages of Arabic, Dinka, Nuer, Amharic, Somali, and Oromo, and then back into English to ensure the original intent was conveyed, has not been viable, given the shortage of translators and the numbers of languages involved.

A strike at the plant in 2005 forced the company to alter its recruitment strategy. Most of the strike's supporters came from African line workers. Once the strike was settled, the company, with the full blessing of the provincial government, retaliated against the strikers by staffing the plant with temporary workers from Asia and Latin America.

DISABLING MEATPACKING WORKERS

Injury has always been endemic to meatpacking, and from the mid-1970s until the end of the 20th century it had the highest injury and illness rate of any industry in America—about three times greater than the overall manufacturing average (Stull and Broadway 2004:63). The most significant illnesses and

injuries in modern meatpacking plants are associated with musculoskeletal disorders, arising from repetitive motions, most notably, carpal tunnel syndrome: “a condition in which the nerve passing through the wrist to the hand is pinched and compressed because of fast repeated forceful motions” (Personick and Taylor-Shirley 1989:5). It “can frequently lead to severe nerve damage, and the crippling of the hand or wrist, making it impossible for workers to grip or pick up everyday objects” (Brooks 1988:13).

In 1990, Secretary of Labor Elizabeth Dole commissioned a study of repetitive motion injuries. Ten years later, President Bill Clinton concluded this process by issuing a set of ergonomic standards designed to reduce on-the-job repetitive motion injuries (U.S. Department of Labor, OSHA Office of Communications 2001). Within days of taking office in 2001, President George W. Bush repealed these standards, saying his administration would pursue a “comprehensive approach” to ergonomic injuries. This comprehensive approach consisted of issuing voluntary guidelines to specific industries and changing injury reporting requirements. In 2002, OSHA issued a new work accident report form that eliminated the column for musculoskeletal disorders. A year later it decided employers do not have to record when workers report ergonomic injuries (Center for American Progress; OMB Watch 2004). The effect has been dramatic.

Between 2000 and 2006 meatpacking’s occupational injury and illness rate dropped from 24.7 per 100 full-time workers to 12.5 (U.S. Department of Labor, n.d.) The rate for poultry workers dipped from 14.2 per 100 to 6.6, the lowest level ever recorded, and only slightly higher than the rate of 6.0 for manufacturing in general (Karapetian 2007). Rates for repeated trauma went from 8.1/100 workers in 2000 to who knows what in 2006, when the government no longer collected the data! Injury and illness rates for meat and poultry workers have declined steadily since peaking in the mid-1990s, but this dramatic drop is clearly a function of changes in reporting procedures, aided by Bureau of Labor Statistics (BLS) sleight of hand that fails to classify plant cleanup crews as meatpacking workers because they work on contract.

ASLEEP AT THE WHEEL, OR CORPORATE LAPDOG?

The federal government has also failed to enforce antitrust laws. The Beef Trust—Armour, Cudahy, Morris, Swift, and Wilson—was broken up in 1920 because these firms accounted for about 55 percent of the beef market. Today Cargill, JBS S.A., and Tyson control 80 percent (Keefe 2008). But a succession of administrations—Democratic and Republican alike—has chosen to ignore the power of this billion-dollar corporate oligopoly. It is easy to see why. One of Bill Clinton’s earliest and biggest financial contributors was Don Tyson, president of Tyson Foods, Inc. On the Republican side, Wendy Lee Gramm, wife of Texas Senator Phil Gramm, served on IBP’s board of directors before

it was bought out by Tyson. ConAgra, Smithfield, and Cargill, along with the American Meat Institute, the industry's trade association, spend millions of dollars each election cycle on lobbying and campaign contributions.

In 2008 alone, combined lobbying from agribusiness totaled more than \$139 million. Of that total, Tyson Foods contributed \$2.67 million, while Smithfield gave \$1.25 million. The national associations representing beef, chicken, and pork producers combined for \$1.43 million (Center for Responsive Politics, n.d). These funds are intended to influence elections, votes in Congress, and policy formulation and implementation in key federal agencies such as the Departments of Agriculture and Energy, the Environmental Protection Agency, and the Office of the U.S. Trade Representative (CNN Money 2008; Associated Press 2008).

The power of major corporations is manifest in their successful efforts to thwart controls on the overuse of antibiotics in animal agriculture. For more than a decade, Senator Edward Kennedy (D-Mass.) repeatedly introduced, without success, legislation to phase out nontherapeutic use of antibiotics in animal agriculture. Sponsored in the House of Representatives by Louise Slaughter (D-N.Y.), the Preservation of Antibiotics for Medical Treatment Act is supported by the American Public Health Association, the American Medical Association, and American Academy of Pediatrics. It is opposed by the Animal Health Institute; major drug companies, including Dow, Monsanto, Novartis, and Pfizer; and poultry and pork producer organizations.

In hearings before the House Rules Committee in July 2009, the Food and Drug Administration's principal deputy commissioner for food and drugs testified in favor of a ban on the use of antibiotics in healthy livestock and poultry to promote growth and feed efficiency. Also speaking in favor of the ban was Steve Ells, founder, chairman, and co-CEO of Chipotle Mexican Grill, which serves antibiotic-free meat. Opposing a legislative ban was the Coalition for Animal Health, among whose members—a veritable Who's Who of industrialized agriculture—are the American Farm Bureau Federation, American Feed Industry Association, American Meat Institute, American Veterinary Medical Association, Animal Health Institute, National Beef Cattlemen's Association, National Chicken Council, National Pork Producers Council, and the United Egg Producers (Drovers News Staff 2009; Salvage 2009). The coalition argued that the bill to restrict the use of FDA-approved antimicrobials is "unscientific and unjustified" and "will jeopardize our ability to protect animal health, animal welfare, and the food supply" (Glover 2009).

Given the entrenched interests operating at the federal level, the likelihood of significant congressional reform of industrialized agriculture seems remote. At the state level, the picture is equally bleak. Wendell Murphy, widely credited with pioneering contract hog production, served five terms in the North Carolina legislature, where he spearheaded legislation to exempt swine and other livestock producers from local zoning regulations (Furuseth 1997). So successful were efforts to boost the industry that the number of

hogs in North Carolina shot from 2.6 million in 1988 to about 10 million in 2000, second only to Iowa. Along the way, North Carolina became the poster child for all that could go wrong with industrialized hog production—leaking lagoons, fish kills, groundwater contamination, and bitter and protracted efforts to organize meatpacking workers at Smithfield's pork plant in Tar Heel, the world's largest.

THE 2008 FARM BILL

Federal policies governing agriculture and related areas, such as conservation and nutrition, are authorized under the so-called farm bill, which is renewed every five to seven years. The farm bill is a Christmas tree, upon which competing constituencies aggressively vie to hang their ornaments (Institute for Agriculture and Trade Policy 2007:8). Before they can be hung on the tree, ornaments must win approval of the members of the agriculture committees in both houses of Congress. Committee members may let reform-minded representatives or senators add new programs, like funding for African American farmers or organic research, or add more money to existing ones, such as nutrition and conservation. But agriculture committee members, who represent districts that receive 42 percent of farm subsidies, have historically hung the biggest ornament of all—farm subsidies—on top of the tree.

The 2002 farm bill was up for reauthorization in 2007, but attempts by the House of Representatives and the Senate to reconcile their versions of the bill extended well into 2008. Operating under eight temporary extensions (Delta Farm Press 2008; Clayton 2008), Congress finally passed a new farm bill on May 22, 2008, despite opposition from President Bush. The House and the Senate voted overwhelmingly to override the president's veto, and on June 19, Congress enacted the Food, Conservation and Energy Act of 2008 (P. L. 110-6124), which authorizes up to \$307 billion in spending over five fiscal years.

Some 50 percent larger than the one it replaced, the 2008 farm bill is 673 pages long and contains 15 titles: Commodity Programs; Conservation; Trade; Nutrition; Credit; Rural Development; Research and Related Matters; Forestry; Energy; Horticulture and Organic Agriculture; Livestock; Crop Insurance and Disaster Insurance Programs; Commodity Futures; Miscellaneous; Trade and Tax Provisions (USDA 2008). Each title is divided into subtitles and myriad sections. It takes but a cursory review of the 19-page table of contents to see just how many—and how varied—are the interest groups that managed to decorate the newest farm bill.

A shift in the balance of power between competing interest groups is also apparent. Absent in 2002, the new bill provides for horticulture and organic agriculture; commodity futures; livestock; taxes; and a permanent

disaster assistance program (Delta Farm Press 2008). More than two-thirds (\$209 billion) of the projected funds are scheduled to be spent on nutrition programs, mainly domestic food aid, up from 41 percent in the 2002 farm bill (American Farmland Trust 2008a). Commodity programs are expected to account for only about 10 percent of total spending under the 2008 farm bill, compared to 23 percent over the course of the 2002 legislation (Murphy and Suppan 2008).

The 2008 farm bill addresses several flaws in the current system. Not only does it legislate significant investment in nutritional programs, but it also mandates a substantial number of programs dedicated to fruits and vegetables, dramatic increases in support for research on organic agriculture and marketing, as well as assistance in qualifying for organic certification, more money for farmers' markets, support for beginning farmers and ranchers, and new funding for farm and ranch lands conservation and stewardship.

But the devil is in the details, and so it is with the farm bill, which contains more than 600 provisions. To fully implement the bill will require 170 regulations and more than 100 reports and studies (USDA 2009). Like its predecessors, the 2008 farm bill leaves it to the USDA to establish rules for enacting the legislation, which are developed after a period of public comment. It is not encouraging that in late June 2009, more than a year after its enactment, the House Subcommittee on General Farm Commodities and Risk Management was told that key provisions of the farm bill were not yet in place (Delta Farm Press 2009b).

Legislation can be stalled. Its can also be subverted if regulations are not written in clear and unambiguous language (American Farmland Trust 2008b). The Environmental Quality Incentives Program (EQIP), for example, was established in the 2002 farm bill and has been extended in the 2008 version. It was intended to help reduce pollution from small farming operations, but has instead been used to subsidize CAFOs. Georgia, the state with the most broiler CAFOs, has used its EQIP funds to transport chicken litter from production areas to those parts of the state with sufficient cropland to absorb the manure. The distances involved are such that this system would not be economical without the subsidy (Gurian-Sherman 2008). At the urging of family farmers nationwide, the 2008 farm bill reduces the amount of funding operators can receive through EQIP in the hope of curtailing such subsidies (Ag Observatory 2008).

For the first time the farm bill included a livestock title, which introduces basic protections for livestock and poultry producers. Although a proposed ban on packer ownership of livestock was defeated, the act gives poultry and livestock producers the right to refuse to sign contracts with mandatory arbitration clauses and settle disputes arising from those contracts in the federal judicial district where they live rather than where the company is headquartered. It also approved interstate shipment of state-inspected meat, which will aid independent livestock producers and small meat processors,

and directed the USDA to enforce the 1921 Packers and Stockyards Act prohibition of “undue preference,” such as volume premiums, for large livestock producers. For decades, the USDA has failed to enforce this provision because undue preference was never operationally defined. USDA personnel are presently charged with doing so (Center for Rural Affairs 2009c).

Among the most notable provisions of the 2008 farm bill will be enforcement of mandatory country-of-origin labeling for meats, fruits, and vegetables, a provision of the 2002 farm bill that was never implemented. COOL, as country-of-origin labeling is commonly known, reveals all too clearly that legislation in and of itself does not ensure implementation. Agencies are charged with devising regulations to implement laws, and, once those regulations are approved, agencies must enforce them. Strong opposition by the meat and poultry industry resulted in failure to implement COOL under the 2002 farm bill (Stumo 2008:2). Country-of-origin labeling for meat and poultry, fish and shellfish, fruits and vegetables, and some nuts finally went into effect on March 16, 2009. Retail surveillance and supply chain audits will be conducted through cooperative agreements with 42 states and the USDA in the remainder (Delta Farm Press 2009a). Processed foods are not covered by COOL.

The 2008 farm bill heralds important reforms in U.S. farm, food, and conservation policies. For example, the 2008 bill contains provisions for annual expenditures of \$4 million to support rural microentrepreneurs; \$5 million to improve and increase direct farmer to consumer marketing; and \$18 million to support beginning farmers and ranchers (Center for Rural Affairs 2009a, 2009b). Fifty million dollars are being set aside in 2009 to encourage organic agriculture production (Shreeves 2009). But just because funds for certain programs are authorized in the farm bill does not mean they will actually be allocated for that purpose. Only a portion of the \$307 billion authorized for the five-year life of the current bill are subject to mandatory funding—many of the programs require annual appropriations from Congress, and no doubt cuts will occur in certain programs (American Farmland Trust 2008b). In an effort to offset spending elsewhere in the federal budget for fiscal year 2010, the Obama administration has proposed cuts totaling \$250 million in EQIP, as well as \$43 million for wildlife habitat, \$30 million for farm and ranchland protection, and \$350 million for wetlands preservation (Laws 2009).

As the saying goes, “the more things change, the more they stay the same.” It is telling that “the only large acreage crop that now does not receive support through some type of Farm Bill program is hay” (USAgNet 2008). CAFOs continue to benefit directly from grain subsidies which keep their production costs artificially low (Gurian-Sherman 2008). And reforms can have unintended consequences. Country-of-origin labeling, long awaited and much ballyhooed by producers and consumers alike, has come under sharp attack from our NAFTA trading partners, who have complained to the

World Trade Organization and are threatening tariffs on U.S. products (Smith 2009).

It is too early to tell whether the reforms contained in the 2008 farm bill will create “a wealthier and repopulating rural America,” as USDA officials promise, or a “dangerous cocktail,” straining relations with our trading partners (Smith 2009). Will the 2008 farm bill usher in much needed agricultural reform, or will basic agricultural policies still be broken in 2013, when it comes up for renewal? Will the innovations and reforms of the 2008 farm bill send off healthy new shoots to rejuvenate the tree that is rural America and its agricultural economy, or will that tree continue to rot? Must we merely wait and see, or are there things that can be done?

REGAINING CONTROL OVER OUR FOOD SUPPLY

Complaints about the power of food processing companies often fail to resonate with urban consumers, who are far removed from the *where* and the *how* of food production. Politicians and government officials, whose constituents are increasingly urban, are more likely to curry favor with powerful agribusiness corporations than listen to the dwindling pleas of farmers, ranchers, and other rural residents. Consequently, all three branches of the federal government have done little to assuage concerns about monopolistic practices of the giant corporations that control our food.

Regulatory agencies and the courts continue to ignore the fact that our food supply system is controlled by a few corporations. The consequences for our food security, safety, and quality are significant. But viable alternatives exist—around the world and among a growing number of producers and providers in North America. For example, nonprofit foundations, such as the Kerr Institute of Poteau, Oklahoma, and the Center for Rural Affairs, Lyons, Nebraska, are actively engaged in research, lobbying, and educational efforts to make farming and ranching “environmentally friendly, socially equitable, and economically viable over the long term” (Kerr Center for Sustainable Agriculture 2007). The Land Institute, located in Salina, Kansas, is engaged in a long-term effort to develop perennial food crops as a sustainable alternative to annual row crops.

Current agricultural policies mainly benefit agribusiness conglomerates, such as Tyson, Cargill, and ADM, with most farm subsidies going to five row crops—corn, wheat, soybeans, rice, and cotton (Grunwald 2007). But an array of nongovernmental organizations and grassroots coalitions of producers and consumers are calling for change. Over the last decade the National Catholic Rural Life Conference has called for an immediate moratorium on large-scale livestock and poultry confinement facilities. The Consumer Federation of America, the Humane Society of the United States, and EarthSave have joined with the National Family Farm Coalition and the National Farmers

Union, with the Delmarva and Georgia Poultry Justice Alliances and the National Contract Poultry Growers Association, to call for increased regulation of pork and poultry production. The Sierra Club has named “protect[ing] America’s water from factory-farm pollution” one of its four national priorities. And the Organization for Competitive Markets has emerged to organize producers, educate the general public, lobby Congress about the growing threat of concentration in animal and grain production and processing, and challenge these practices in the courts.

The goal of industrial agriculture is to produce large quantities of uniform products at the cheapest price. As a result, today’s food is not so much grown as manufactured, not so much tasted as consumed. But it is not too late to put the culture back in agriculture, to put the taste back in our food. All of us are eaters, after all, and the food choices we make shape systems of production, processing, and packaging. Those who seek a better environment and a sustainable agricultural system—one that respects air, land, and water, as well as producers, harvesters, and processing workers—must show consumers the connection between the food they eat and the prevailing industrial production system, which pollutes air and water, threatens their health, exploits and endangers workers, impoverishes farm families, and is dependent upon massive taxpayer subsidies. Only if we make that connection—and act on it—will we see changes in our food system.

The disconnection between the consumption of food and its production is relatively recent. Historically, communities and systems of food production were inextricably linked, as settlements depended on nearby productive arable land for their food supply. Market squares in Europe are a legacy of the ties between city and countryside; in North America similar ties are represented by such historic landmarks as the Reading Terminal Market in Philadelphia and Seattle’s Pike Place Market. But a century of suburban growth, the related loss of agricultural land, and urban zoning restrictions on agricultural activities have combined with mechanized agriculture, refrigeration, and large-scale food processing to sever the links between food production and consumption. Yet, some North American cities have begun the tenuous process of rebuilding these links by promoting urban agriculture and farmers markets.

Urban farms come in a variety of forms, some are no more than half a dozen raised beds on a vacant city lot while others have several acres in vegetable production. Community gardens in the United States were born out of a need to feed the destitute, and they have been part of America’s urban landscape since the 1890s. They continue to provide urban dwellers with the opportunity to produce some of their own food. The American Community Gardening Association lists 114 community gardens and organizations in 35 states on its Web site (American Community Gardening Association 2009). The most organizations and the largest community gardening program in the United States are found in New York City. Its Parks and Recreation

Department's Green Thumb Program assists over 600 gardens and nearly 20,000 residents—most of these gardens are located in economically disadvantaged neighborhoods (Green Thumb 2009).

Community gardens are not restricted to large cities. Duluth, Minnesota's, Community Gardening Program was established as a nonprofit organization in 1981. Its mission: "to strengthen the Duluth area community and foster self-sufficiency by providing access for all to food production and preservation resources and promoting sustainable gardening practices" (Duluth Community Garden Program 2009).

For urban agriculture to succeed, cities often have to modify or create new ordinances to deal with manure and noise issues. Madison, Wisconsin's city council reversed a ban on backyard chickens in 2004 and adopted an ordinance similar to regulations in Seattle, Baltimore, Washington, D.C., and Los Angeles. It allows for up to four hens (no roosters) per property in a coop, no closer than 25 feet from the nearest neighbors' living quarters. Butchering within the city limits is banned and the animals have to be raised for eggs. So far, an estimated 150 Madison families have taken advantage of the new ordinance (Huffstutter 2009). Duluth amended its city code in 2008 to permit the raising of up to five chickens per single-family dwelling.

Albuquerque has one of the most lenient "chicken ordinances" in the United States, allowing up to 15 chickens per household. It is also legal to keep chickens in many other U.S. cities, including San Diego, San Jose, Oakland, Dallas, San Antonio, New York City, and Seattle (Urban Chickens 2009). Operational since 2007, BackYardChickens.com, a California-based Web site, claims 35,000 registered members and 7,000 posts a day.

Growing food in the city means there is a need for pollinators, and that means bees, but many cities have ordinances that forbid honey bee colonies on the grounds that bees are a "threat" to humans. But this too is changing. Efforts are underway in New York City to amend the city's health code, which currently prohibits the possession, keeping, harboring, and selling of "wild animals" and "venomous insects," a category that includes bees. "Honey from the Hood" is increasingly common, as beekeeping is now legal in Vancouver, Portland, Seattle, Toronto, Atlanta, and San Francisco. Chicago's city hall and cultural center have several hives on their rooftops; products from the hives are sold at local markets and the Whole Foods supermarket chain (Just Food 2009). The Chicago Honey Co-op, located on the city's west side, has over 100 rooftop bee hives and sells its products (honey and candles) at local farmers' markets and online (Chicago Honey Co-op 2009).

If tending a garden, raising chickens, or maintaining a beehive is beyond the abilities or interests of the time-pressed urbanite, farmers' markets are an increasingly viable option for locally produced food. The number of farmers' markets operating in the United States have exploded from 1,755 in 1994 to 4,685 in 2008, a 166 percent increase (USDA Agricultural Marketing Service 2009a). Most markets operate on a seasonal basis and emphasize

locally produced food. San Francisco is served by 10 farmers' markets; Seattle and Pittsburgh each have 9; Philadelphia and Portland, Oregon, have 14 apiece. (USDA Agricultural Marketing Service 2009b). Farmers' markets are also thriving in mid-size midwestern towns like Lawrence, Kansas, and smaller ones like Marquette, Michigan.

State departments of agriculture now promote their agricultural businesses, farmers' markets, and food products through programs such as Kentucky Proud and GO TEXAN. Some communities have even begun branding locally produced food. Detroit's agricultural network promotes a *Grown in Detroit* program that sells locally produced fruits and vegetables in four farmers' markets throughout the city "grown by families and youth in community gardens and urban farms found in backyards, city parks, vacant lots, and school yards throughout Detroit, Hamtramck, and Highland Park. *Grown in Detroit* fruits and vegetables are produced without synthetic chemicals, pesticides, fertilizers, or genetically modified (GMO) products" (Garden Resource Program Collaborative 2009).

WHAT YOU CAN DO TO IMPROVE THE WAGES OF FOOD FACTORIES

The wages of food factories are as much social and cultural as they are political, economic, environmental, and nutritional. Because they are paid by so many and in so many ways, there is no single solution, no simple way to undo what Wendell Berry calls the bad work behind us. There are many things "demanding to be done," things that can be done by each of us. We offer here a few suggestions on where to begin.

1. You may not have the political influence of multinational corporations, but you are not without power, especially when you join with other concerned citizens in common cause. Legislators can be influenced by campaigns in the public interest—country-of-origin labeling is a case in point, not only about what can be done, but also about how hard it is to achieve basic reform.

At this writing, the current 111th Congress has a number of bills pending, that, if enacted, might improve meatpacking working conditions and the sustainability of our food system. The Food Safety Enhancement Act (H.R. 2749) would increase government oversight of food production and processing. The bill's major provisions include inspecting high-risk food facilities at least every 6–12 months and low-risk facilities at least every three years, compared with the current FDA average of once every 10 years. It would also require any food facilities that sell directly to American consumers to register with the FDA and pay an annual fee,

and it charges the USDA to establish a trace-back system for use in food contamination events. Small-scale producers are most concerned about the last two provisions, since they would be assessed the same (\$500) fee as their larger counterparts, and they would be required to establish a trace-back system even when they sell directly to consumers.

The Community Gardens Act of 2009 (H.R. 3225) allows (but does not mandate) the USDA to create a grant program to help groups or organizations start, build, and run community gardens. It is meant to encourage healthy lifestyles, make fresh fruits and vegetables more easily available to communities, reduce greenhouse gas emissions, and educate the public on the value of community gardening.

The Employee Free Choice Act (H.R. 1409; S. 560), introduced in March 2009, is a controversial bill that its sponsors claim will make it easier for unions to organize. Unions are not a simple panacea for all that ails meatpacking, but they have the potential to ensure that employee concerns over working conditions are addressed and acted upon through contract negotiations. It is no coincidence that the company that revolutionized modern-day meatpacking in the United States—IBP—was virulently anti-union. From its inception, IBP refused to abide by the terms of the existing union master contract, and, thus, began the industry's long decline in wage and working conditions. The Employee Free Choice Act would let workers choose whether to unionize through secret ballot votes or card checks in which workers obtain union recognition as soon as a majority of employees at a workplace sign union cards. Current law permits management to insist on a secret ballot, which often lets companies campaign for lengthy periods against unionization. In July 2009 the bill's Senate sponsors removed the card check provision to ensure the filibuster-proof support of 60 Senators (Greenhouse 2009). The bill is strongly opposed by employers, and its fate is uncertain.

You can express your views on these bills, as well as the Preservation of Antibiotics Medical Treatment Act, by contacting your U.S. senators and your representative in the House.

2. Legislation is not the only means by which food giants can be convinced to alter their corporate practices. Under pressure from consumers, restaurant chains like McDonald's, and grocery chains such as Whole Foods, are insisting on more humane treatment and slaughter of animals, and suppliers such as Smithfield are responding (Neitzel 2007). In June 2009, JBS S.A., the world's largest beef processor, signed an agreement with Walmart that promises not to source cattle from deforested areas or from producers who exploit child or slavelike labor (Johnston 2009). Although still a tiny part of the total market, consumer demand for organic and "natural" foods is rapidly growing. Arby's, Chipotle Mexican Grill, Chick-fil-A, and Panera Bread Company are some of the restaurant chains that are responding to

public demand for hormone- and antibiotic-free “natural” foods (Horovitz 2005).

3. Land use regulations dictate agricultural policy and practice “on the ground.” Zoning ordinances are enacted by local governments, and private citizens can influence such decisions. Perhaps the most effective means available to private citizens and local communities to regulate animal agriculture is to support stronger rural zoning to limit the number and size of CAFOs, ensure adequate setbacks from neighbors, and protect air and water quality. Paradoxically, in the city and the suburbs, citizens may wish to rescind local ordinances that prohibit modest forms of animal agriculture.
4. If consumer pressure has pushed multinational fast-food chains toward healthier menus and the meat and poultry industry toward better practices in animal agriculture and slaughter, then how much more influence can we have on how we eat and where we actually purchase our food. You can buy locally and eat seasonally. You can patronize farmers’ markets, local food co-ops, box schemes, and other forms of community-supported agriculture (CSA), which offer in-season vegetables, meat, and dairy products from local farms. You can ask your supermarket manager to stock and label local and regional foods and sell natural, grass-fed, free-range, and antibiotic-free meat.
5. You can also grow some of your own food. You don’t need to be a farmer or a master gardener to plant, harvest, and enjoy delicious and nutritious homegrown fruits and vegetables. Nor do you need a “back 40” to grow them—a sunny spot in the backyard, some pots on the deck or patio, a plot in the community garden; some good soil, compost, and a few simple tools are all you need to get started.

For more information and ideas about taking control over your food supply, visit the following Web sites:

International Society for Ecology and Culture: www.isec.org-uk

Institute for Agriculture and Trade Policy: www.iatp.org

Food First: www.foodfirst.org

GRACE Factory Farm Project: www.factoryfarm.org

Organization for Competitive Markets: www.competitivemarkets.com

Slow Food USA: www.slowfoodusa.org

Renewing America’s Food Traditions: www.environment.nau.edu/raft

To find local sources of food, visit Local Harvest at the following Web site: www.localharvest.org

CONCLUSIONS

When we began our meatpacking odyssey over 20 years ago, neither of us could imagine where it would take us, nor could we foresee that our research would do so much to raise awareness of the human suffering hidden

in our food. Few then knew that the meat and poultry industry was victimizing farmers, processing workers, and rural communities, polluting air and water, and abusing animals. The general public was unaware of how dangerous and debilitating is the making of meat. They knew little of the public subsidies enjoyed by food processing firms in the form of tax incentives and commodity programs, or of the conflicting roles that government at all levels has played in subsidizing this hazardous and polluting industry. Few were aware of just how crucial immigrants had become—from field to factory—in putting food on the American table. All that has changed.

When we embarked on our study of the meat and poultry industry we had easy access to cattle feedyards, hog barns, and chicken houses. We had relatively little trouble touring packinghouse killfloors and processing lines. We were even hired to study labor relations in one large plant. But that has changed too. Recoiling from two decades of relentless criticism by scholars, journalists, and activists, the industry is embattled and increasingly insular.

Others have taken up our call for change. Our work, and that of other social scientists, has informed prize-winning exposés (Horwitz 1994) and bestselling books (Schlosser 2001). Calls for reform in our food system have now become commonplace, as authors such as Michael Pollan, Peter Singer, and Jim Mason have brought many of these issues to ever wider audiences. Who would have thought 20 years ago that we would take a break from writing the final draft of this article to munch popcorn in a darkened movie theater while images of feedlots, packinghouses, and the insides of chicken houses played before us in *Food Inc.*

As Eric Schlosser said in his foreword to *Slaughterhouse Blues*, our research has shown what has gone wrong. We are encouraged that Americans have become far more aware of where and how their food is produced. But the hardships from the wages of food factories remain, and much must be done to correct them. As Schlosser (2004:xiv) tells us: “Changes will not simply happen. . . . Changes will occur when consumers realize what they’ve been eating, get angry, and demand something different. . . . It remains our responsibility, with every vote and every dollar spent on food, to start making it right.”

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