

SCIENCE & TECHNOLOGY

A Husbandman's Place

THE SOURCE: "Renewing Husbandry" by Wendell Berry, in *Orion*, Sept.–Oct. 2005.

way. They note that human perceptions of taste are far more open to the power of suggestion than we generally realize. Give test subjects an ordinary energy bar, for example, with a label falsely stating that it contains "10 grams of soy protein," and they'll rate it as less tasty than other folks will who know the truth. (Most people assume that soy tastes bad, according to the authors.) The lesson: Tasty words make tastier foods.

But there are some words food producers should avoid. Consumers who are told that a product is "new" and "good for them" will assume that it doesn't taste very good—as McDonald's learned when its McLean sandwich flopped. It's better to reduce the harmful contents of foods quietly—by making slight alterations, such as replacing fat with water, fiber filler, or air, while doing one's best to maintain their perceived taste.

What about product labeling? Wansink and Huckabee are skeptical that people pay close attention. A study of customers at Subway, which touts the dietetic sandwiches it includes on its menu and provides oodles of information about its offerings, found that those who order subs dripping with mayonnaise and cheese tend to be influenced by the advertising rather than the information; they vastly underestimate how many calories they're consuming.

It wouldn't take much to make America slimmer—a 10 percent reduction in daily calorie consumption would do the trick for most people. If the food industry doesn't get behind the cause, the authors warn, a rising tide of lawsuits and regulations will ensure that corporate profits, at least, get thinner.

WHEN GAS-POWERED TRACTORS appeared on the landscape a century ago, farmers began to lose their connection with the farm. To mourn that loss isn't merely to wax nostalgic, but to recognize the damage that mechanization and modern agricultural "science" have done to our world, says Wendell Berry, the noted writer and Kentucky farmer. "Husbandry"—the word itself sounds quaint from disuse—has become nearly obsolete.

"Husbandry is the name of all

the practices that sustain life by connecting us conservingly to our places and our world; it is the art of keeping tied all the strands in the living network that sustains us," writes Berry. "Most and perhaps all of industrial agriculture's manifest failures appear to be the result of an attempt to make the land produce without husbandry."

As farming became more industrialized, after World War II, farm families stopped producing the food for their own tables; economic imperatives withered the organic relationship between farmer and farm.

In reducing the art of farming to "animal science" and "soil science," says Berry, agriculturalists oversimplified it. "The husband, unlike the



One of modern agriculture's dehumanizing effects, say critics such as Wendell Berry, is a loss of human sympathy for animals, as evidenced by conditions on huge poultry farms such as this.

'manager' or the would-be objective scientist, belongs inherently to the complexity and the mystery that is to be husbanded, and so the husbanding mind is both careful and humble. Husbandry originates precautionary sayings like 'Don't put all your eggs into one basket' . . . It does not boast of technological feats that will 'feed the world.'

Agricultural science ignores farming's larger context. The sympathy for "creatures, animate and inanimate," has been lost. Other casualties are local adaptation to the particular farm and field and coherence of form. "The farm is limited by its topography, its climate, its ecosystem, its human neighborhood and local economy, and of course by the larger economies, and by the preferences and abilities of the farmer. The true husbandman shapes the farm within an assured sense of what it cannot be and what it should not be."

The sense of limitlessness—of fuel, water, and soil—that gave rise to the recent focus on productivity, genetic and technological uniformity, and global trade has proven illusory, according to Berry. Massive single-crop fields and factory farms are unsustainable, and the necessity of local adaptation "will be forced upon us again by terrorism and other kinds of

political violence, by chemical pollution, by increasing energy costs, by depleted soils, aquifers, and streams, and by the spread of exotic weeds, pests, and diseases. We are going to have to return to the old questions about local nature, local carrying capacities, and local needs."

Husbandry can be learned anew in colleges of agriculture, Berry concludes, but only if many agricultural scientists become farmers themselves and learn to accept the practical limitations and the element of mystery that inhere in husbandry.

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The War Against Error

THE SOURCE: "Scientific Error and the Ethos of Belief" by Lorraine Daston, in *Social Research*, Spring 2005.

FEW BOUNDARIES ARE AS FLUID AS the one between established knowledge and conjectural belief in the modern sciences, where new research can fundamentally revise, or even sweep away, the received wisdom of a particular discipline. "The price of scientific progress is the obsolescence of scientific knowledge," writes Lorraine Daston, executive director of the Max Planck Institute for the History of Science and an honorary professor at Humboldt University in Berlin.

The modern sciences were born in the 16th and 17th centuries, and the problem of reaching an accommodation between knowledge and belief was born right along with them. During those centuries, Copernican astronomy and other discoveries overturned "a whole range of explanatory systems and empirical claims that had been accepted as eternal truths." Thinkers responded to the stunning exposure of error by devising philosophical systems that insisted that beliefs have explicit, reasoned justification.

The branch of philosophy that concerns itself

EXCERPT

Satanic Design?

Many who accept the fact of evolution cannot, however, on religious grounds, accept the operation of blind chance and the absence of divine purpose implicit in natural selection. They support the alternative explanation of intelligent design. The reasoning they offer is not based on evidence but on the lack of it. The formulation of intelligent design is a default argument advanced in support of a non sequitur. It is in essence the following: There are some phenomena that have not yet been explained and that (and most importantly) the critics personally cannot imagine being explained; therefore there must be a supernatural designer at work. The designer is seldom specified, but in the canon of intelligent design it is most certainly not Satan and his angels, nor any god or gods conspicuously different from those accepted in the believer's faith.

—EDWARD O. WILSON, emeritus professor at Harvard University, in *Harvard Magazine* (Nov.–Dec. 2005)