



Hemp, Inc.

An ancient weed with an illustrious past sheds its hippie image and comes of age, offering hope in the form of food, fuel, and fiber. So why is the government impeding its progress? VN writer **Mark Hawthorne** delves deep into the great hemp debate.

HEMP, IT APPEARS, IS HIP. CONSIDERING how long humans have been cultivating it—12,000 years—hemp hardly seems newsworthy. And yet this versatile plant is enjoying a genuine Renaissance. Almost overnight, natural-food stores have begun offering hemp milk, hemp salad dressings, and hemp cereal, each package touting hemp as a superfood. Socially responsible companies are turning to hemp as a more sustainable source for paper goods and biodegradable plastic. Even hemp clothing is going mainstream, shedding its “burlap sack” image to become the eco-friendly choice of stylish stars and frugal fashionistas alike.

“There’s no other plant that is more versatile anywhere in the world,” says Gerry Shapiro, founder of the Merry Hempsters, which makes vegan lip balms, muscle rubs, and lotions. Shapiro is one of industrial hemp’s biggest advocates, and he extols its prolific nature. “Hemp has amazing growth potential,” he says. “In Switzerland, I saw hemp grow to 23 feet in four months. *Giant*. Can you imagine a tree growing that high, that fast?”

The US has become the only industrialized nation in the world that does not allow the production of industrial hemp.

Listening to advocates tell it, this vigorous plant—which is grown for food, fiber, and cold-pressed oil—is nothing short of a miracle crop. Hemp activist and author Jack Herer says its uses are practically unlimited. “Housing, paper, clothing, rugs, curtains, plastic—all these things can be made with hemp,” he says. “And it’s good for the planet.” Indeed, hemp will yield three to eight tons of fiber per acre—four times that of the average wood forest. Textiles and paper made with hemp are durable and long-lasting; it is a renewable source of fuel, and hemp is used in a natural, energy-efficient building material called hempcrete. Hempseed oil is even packed with Omega-3 and Omega-6 essential fatty acids. All this in a plant that needs no pesticides or herbicides.

If *only* it were legal to grow this wonder flora in the United States.

Rope v. Dope

One needn’t dig too far into the dirt that surrounds hemp to figure out the controversy here. People tend to confuse industrial hemp with the hallucinogenic hemp more

commonly known as marijuana. Both hail from the *Cannabis sativa* family, but while its illicit botanical cousin contains high levels of a psychoactive ingredient called tetrahydrocannabinol (THC), less than one percent can be detected in industrial hemp. Ingesting industrial hemp for recreational, medicinal, or religious purposes would be like trying to get high from poppyseed bagels or non-alcoholic beer. Nonetheless, because the Drug Enforcement Administration classifies all *Cannabis sativa* plants as marijuana, the US has become the only industrialized nation in the world that does not allow the production of industrial hemp, though it’s fine to buy it elsewhere. As a result, US businesses like the Merry Hempsters must pay a premium to import zero-THC hemp from such countries as Canada, China, England, India, and Romania.

It wasn’t always so. George Washington and Thomas Jefferson grew hemp on their plantations, the first US flag was made from it, and Ben Franklin owned a hemp mill. For centuries, US ships were outfitted with hemp sails and rope, and bibles were printed on

hemp paper. Indeed, hemp was rivaled only by tobacco as early America’s favorite crop. In the early 20th century, Henry Ford built a prototype car with a plastic body made from hemp said to be 10 times stronger than steel; a 1941 promotional film shows a worker’s sledgehammer simply bouncing off the car with each energetic swing, hardly leaving a scratch. The car even ran on hemp-based fuel. It seemed hemp’s possibilities were endless.

So why did the US government nip hemp in the bud? There are two main schools of thought, and the most widely known is promulgated by Jack Herer. His bestseller *The Emperor Wears No Clothes* alleges that in the 1930s, the DuPont Company and publishing magnate William Randolph Hearst—fearing hemp would reduce demand for their respective nylon and paper products—conspired to suppress hemp production and eventually used their political clout to get all hemp production in the US outlawed. *The Emperor*, considered the bible of hemp, was first published in 1985—plenty of time for paranoid cannabis enthusiasts to share conspiracy tales between Cheech & Chong



Products made from hemp include cereal, milk,



bags, purses,



beauty products,



oil, salad dressing,



paper,



plastic CD cases,

and clothing.





The flag of the founding fathers was made from hemp. Current proponents of hemp legalization include Barack Obama, Secretary of Agriculture Ed Schafer, and Dennis Kucinich.

HempFacts

The wonder weed, grown for more than 12,000 years for textiles, paper, and food, is a loaded treasure trove of fun factoids.

- ❖ Thomas Jefferson drafted the Declaration of Independence on hemp paper.
- ❖ Hemp is most often grown without herbicides, fungicides, or pesticides.
- ❖ Industrial hemp is extremely low in THC, the euphoria-producing ingredient found in marijuana.
- ❖ More mildew-resistant than cotton, hemp fiber is also longer, stronger, and more absorbent.
- ❖ An alternative to wood fiber, hemp has the potential to save forests for watershed, wildlife habitat, and recreation, while supporting oxygen production and carbon sequestration.
- ❖ Hemp can yield three to eight dry tons of fiber per acre, four times what an average wood forest can yield.
- ❖ More than 30 industrialized democracies distinguish hemp from marijuana.
- ❖ Hemp can be processed into fuel pellets, liquid fuel, or gas, making it a source of renewable, low-polluting energy.

movies—and the theory has become fact among many hempsters.

But Steven Wishnia, author of *The Cannabis Companion* and former senior editor at *High Times* magazine, believes Herer's logic is based on several false premises, including that Hearst, publisher of many magazines and daily newspapers, owned paper mills. Instead, Wishnia observes, Hearst purchased the raw paper he needed and actually went into debt when the cost of paper increased in the 1930s. According to Wishnia, it was prejudice—not boardroom scheming—that doomed industrial hemp. Because pot-smoking was popular among blacks and Mexican immigrants, he says, racist lawmakers successfully banned marijuana, and by extension, all hemp throughout the United States in 1938 by enacting the Marihuana Tax Act.

Now, says Wishnia, the only way US farmers will ever be able to grow industrial hemp is by making marijuana legal again. "Although the hemp and marijuana movements aren't the same, they overlap enough so that they're pretty well linked politically," he says. "And without legalizing marijuana, legalizing hemp would almost certainly involve costly and excruciatingly tedious requirements for THC testing and farm security."

A Little Help from Friends

The movement to legalize this pariah plant does have some influential supporters, notably Ohio Congressman Dennis Kucinich and Texas Congressman Ron Paul. Kucinich chairs the House Subcommittee on Domestic

Policy (which oversees, among other things, matters involving criminal justice and the Office of National Drug Control Policy), and Paul has twice introduced a federal bill in Congress to overturn the prohibition of hemp. Paul's bill, the Industrial Hemp Farming Act, would amend the federal Controlled Substances Act to exclude industrial hemp from the definition of marijuana, allowing individual states to determine the plant's legal status. In other words, farmers in the seven states that have passed pro-hemp farming laws—Hawaii, Kentucky, Maine, Maryland, Montana, North Dakota, and West Virginia—could move ahead with their initiatives and grow industrial hemp without interference from the US government. (California would have made it eight, but Gov. Arnold Schwarzenegger vetoed the California Industrial Hemp Farming Act in 2007.)

Because it is not an election-year issue, the Congressional bill will likely have to wait until 2009, says Adam Eidinger of Vote Hemp, a non-profit dedicated to the decriminalization of hemp. "It is ironic that something as benign as hemp, something that is a wonderful source of vegan protein without the side effects of soy protein isolate, is illegal," he says, adding that Washington also sees hemp as a political hot potato. "Congressmen mistakenly believe there's a pot stigma associated with industrial hemp. They don't want to be labeled 'the Pot Congressman.' They don't want to become the butt of jokes on late-night television."

Perhaps hemp's most high-profile supporter is none other than Barack Obama, who supported a resolution on industrial hemp in the Illinois legislature in 2000. "If he becomes the next president, I think we'll have a situation in Congress where advocates will feel 'we can do this,'" says Eidinger. "We have widespread awareness of the issue. We'll have hearings as soon as Dennis Kucinich and Ed Schafer, the Secretary of Agriculture, work out their schedules. Not only does the Secretary of Agriculture have an authoritative voice on agricultural issues, but as governor of North Dakota, Schafer signed the state's hemp bill into law. He's a strong supporter of industrial hemp. I do feel we're closer than ever."

"One cannot overstate the importance of having congressional and presidential support for industrial hemp," says John Dvorak, founder of hempology.org. Dvorak observes that passing hemp legislation will open the way for research and development into hemp

cultivation, harvesting, and manufacturing. “We have relied on other countries to break ground in these areas, but it’s time for American ingenuity to take the hemp industry to the next level,” he says. “American consumers would also benefit because the price of hemp products would go down as more products are produced domestically and not shipped from Canada or overseas.”

From Weed to Tweed

Hemp may be best known in the US as a counterculture symbol, but hemp-based goods are becoming the new black. Richard Dash, founder of Dash Hemp, a designer of upscale apparel in Santa Cruz, Calif., has seen a dramatic increase in his business. “It has really been taking off in the last year or two,” he says. “Major retailers are carrying hemp, so we’re doing a lot more private labeling.” He credits Al Gore for making hemp hip. “He got people thinking green.”

“It is ironic that something as benign as hemp, something that is a wonderful source of vegan protein without the side effects of soy protein isolate, is illegal.”

It may be green, but hemp clothing is nothing new. Evidence of hemp fabric has even been found in 10,000-year-old settlements in China, notes John McCabe, author of *Hemp: What the World Needs Now*. “This brought about the end of animal skins as clothing,” he says. “It was the beginning of vegan clothing!”

The Hemp Industries Association (HIA), a trade group representing more than 200 hemp companies and advocates in North America, estimates that US sales of hemp products in 2007 totaled \$330 million. While that might seem like small change, “Hemp foods and hemp as a nutritional supplement will be huge,” says HIA Executive Director Eric Steenstra. “Hemp has the potential to surpass soy due to its excellent nutritional profile, being high in essential fatty acids.”

Indeed, milk made from hemp seeds (specifically, the nut inside the shell) is the new kid on the beverage block, with two companies, Living Harvest and Manitoba Harvest, debuting their hemp-milk lines in 2006. “We tripled sales last year from \$1 million to \$3 million, and we hope to double this year,” says Christina Volgyesi, vice president of marketing for the Portland, Ore.-based Living

Harvest. “Hemp is the fastest-growing shelf-stable milk alternative. It has a lot of versatility and great flavor.”

Mike Fata, president of Manitoba Harvest, says his company is experiencing similar success with their organic hemp milk.

“Consumer demand is growing steadily and is projected to continue at a double-digit pace for at least the next few years,” he says. A farmer-owned Canadian company, Manitoba Harvest exports not just south of the border, but to Europe and Japan, where there’s been a gradual increase in sales. “Hemp has a long history in Asia, so people in Japan understand its benefits.”

Rich and creamy, with a distinctively nutty taste, hemp milk may only have one drawback: a 32-ounce carton costs about \$4, compared to around \$2 for an equivalent amount of soy or rice milk.

Cost is an issue, says hemp entrepreneur Richard Rose, but it’s hardly the only one.

“Hemp in North America will only make sense, economically, when the seed is as cheap as soybean, when it is grown as widely as soybean, and when people no longer associate hemp with pot,” says Rose, president of HempNut Inc., a Santa Rosa, Calif.-based company specializing in hempseed foods. Rose, who also founded the Rella Good Cheese Company, thinks this scenario is unlikely. “Hemp will always be a political statement disguised as a food.”

Hemp holds boundless potential to nourish and clothe our bodies, fuel our transportation, and house our communities. So why doesn’t the US join other progressive nations and hop aboard the hemp bandwagon? Weeding out this renewable resource’s potential from its seedy reputation seems easy when all of hemp’s possible uses and benefits are tallied. With a bit of grassroots activism, coupled with broader awareness of this benign crop, US farmers might well be able to plant a homegrown revival. **VN**

Mark Hawthorne sustained himself entirely on hemp cereal and chocolate-flavored hemp milk while writing this piece.

Health Nuts

Versatile? Definitely. Tasty? Check. But just how healthy are hemp-based foods?

“Hemp has an ideal balance of protein, good fats, fiber, and vital minerals, such as zinc and magnesium,” says John Roulac, founder of Nutiva, a maker of hemp-based food products and supplements. “Many vegans often forget to get enough Omega-3s, and hemp has this essential fatty acid in great-tasting and convenient forms: bars, milk, burgers, and hemp nuts on salads and in smoothies.”

Michael Greger, MD, who specializes in clinical nutrition, agrees that seeds like hemp can add an important boost to diets. “Hemp seeds are a good source of Omega-3s,” he says, “though they only have about 30 percent of the Omega-3s that flax seeds have. But unlike flax seeds, hemp seeds also have GLA [Gamma-Linolenic Acid, an Omega-6], which has additional anti-inflammatory properties.”

“Hemp seed oil is dubbed ‘Nature’s most perfectly balanced oil’ due to the fact that it contains the perfectly balanced three-to-one ratio of Omega-6 to Omega-3 essential fatty acids determined to be the optimum requirement for long-term healthy human nutrition,” adds Washington State University food science professor Barry Swanson. Swanson notes that hemp oil also contains smaller amounts of GLA and two other fatty acids—oleic acid and stearidonic acid—all of which humans need but don’t often find in other foods. “This essential fatty acid profile is unique among edible oil seeds,” he says.

