



## Blueprint for a Green Future

*The following article draws on What Will It Take To Change The American Food System?, a paper delivered by Charles Benbrook at the Kellogg Foundation Food and Society Networking Conference on April 24, 2003. The entire paper is available at <http://www.biotech.info.net/kellogg.pdf>.*

Change in democracies comes slowly, and more slowly still in their bureaucracies, where growth — of departments, agencies, programs — is the yardstick of success. Unless one had been watching closely — or been in the political trenches, where the intricate cut-and-thrust of law-making takes place — it would be easy to believe that USDA recognition of the importance of sustainable agriculture, the creation of the National Organic Program, and the current government incentives to develop bio-based and renewable energy had all just sprung up. In fact, none of these would have occurred without decades of selfless and dogged effort on the part of grassroots organizations, visionary farmers, and a handful of courageous policy makers in government. Yet for all this work, we have managed only a toe-hold for change on the sheer face of American agriculture.

Changing the American food system across its broad front of farming, food manufacturing, and distribution will require, in Charles Benbrook's phrase, "systemic and systematic changes in every area of public policy" affecting agriculture. The sweep of such change can appear overwhelming, but Benbrook offers a 17-point plan to reform the food system that could serve as a blueprint for a greener future.

Breeding plants for resistance to pests and pathogens and moving away from monoculture farming toward more

diversified cropping patterns come first on Benbrook's list. Next comes gearing farm program payments to reward farmers for efficient, nutrient-capturing practices, and integrating livestock widely across cultivated crop land, to make best use of the forages available in diversified rotations. This also involves relocating some beef and dairy



largely under-realized) role to play. Likewise, in the marketplace government must encourage competition, work to realign food channels, and hold corporations strictly accountable for their failures as good citizens — and reward them for sound stewardship. And, finally, government must bring some vision and common sense to the imbroglio over intellectual property rights where living organisms are involved and vigorously fund research and education efforts to develop small- to mid-scale production and processing systems.

Even in this over-simplified sketch, the challenges appear vast — but so did the obstacles to organic standards 25 years ago. What it took to overcome them was the creation of a public demand and a political will to change. If the social, economic, and environmental benefits of sustainable agriculture are to extend to all of America, we as Americans must sustain our efforts to convince policy makers that we will accept nothing less.

production to areas of the country better able to sustain them.

We must reduce the selection pressures on pests and diseases to slow their rate of evolution and genetic adaptation to control measures. This, Benbrook says, will involve preserving susceptible gene pools of pests and resistant pools of plants, while learning more about how agronomic systems affect the evolutionary rates of pests. Meanwhile, in the West, we must also move from low-value, high water-use crops and pasture (e.g., alfalfa) to higher-value crops that can be sustained on low-volume irrigation techniques.

In everything from enforcement of health and safety inspections to restricting the use of sub-therapeutic antibiotics, from raising international food-safety standards to setting nutritional standards that safeguard public health, the federal government has a large (and

### INDEX

Blueprint for a Green Future .....	1
"Our Readers Ask . . ." .....	2
Staff Spotlight: Tim Johnson .....	2
Resources/Media .....	3
New and Updated ATTRA Publications .....	3
USDA Implements Conservation Title Provisions .....	3
AgEnergy Briefs .....	3
Web Update and User's Guide ...	4



**Staff Spotlight:**  
**Tim Johnson**

Tim Johnson is our Beast Master, the leader of ATTRA's livestock team, who devotes most of his considerable energy to farm business planning and financial perspectives — when he's not out wrangling cattle or drumming up enthusiasm for the Ozark Pasture Beef project.

Tim is from western New York, where his family raised cattle and hogs, and he never had any doubt that he wanted to go into agriculture. But after earning a B.S. in Animal Science from The Ohio State University and an M.S. from North Carolina State, things took a turn he might not have expected, a turn

that led him into the fields of farm planning and finance.

After he completed his Master's degree, Tim stayed in North Carolina for a few years as a private consultant to the state's burgeoning swine industry, one he had become familiar with in graduate school. That was when the full importance of a business approach to farm planning came home to him, along with the realization that it was not a one-time thing. The year-to-year variables on a farm — weather, diseases, the market — are perhaps greater than for any other business, and they are all reflected in the farm's bottom line. Planning begins with records of past performance that can track and account for those variables.

"The power of doing financial analysis," Tim says, "is doing it year after year."

In the mid-1990s, Tim took a position with Michigan State University Extension, working with livestock produc-

ers in western Michigan. It was there that he deepened his involvement with farm management and planning, helping to develop financial packages and analytic software for farmers, as well as addressing production issues related to environmental concerns.

Since joining NCAT in 2001, Tim has continued his work in farm and financial management and animal husbandry, much of it in conjunction with whole-farm planning based on pastured beef production. He has been one of the driving forces behind the USDA-SARE-funded Ozark Pasture Beef project that has enlisted area cattle producers to work together in a study of breeds and forages best suited to producing grass-fed beef — and how to plan a viable farm around that production.

Tim is tough-minded about cost/benefit analysis, except when it comes to his hobby: he fishes — and then he turns them loose.

## “Our Readers Ask . . .”

**Q:** Where can I get information about how to create a business plan for my farm?

C.B.  
Maryland

**ATTRA:** One of the best resources available on farm business development and planning is from Iowa State University's Center for Industrial Research and Service (CIRAS), especially the business planning section of the CIRAS Adding Value to Beef Production Manual. They have several other business manuals that you may find useful, and the Web site address is included with the CIRAS resource below.

Another good source of information that provides links to many other Web sites is the New Farm Options Web page at the University of Wisconsin Extension Service. The complete Web address is also listed below.

Additional useful information on value-added agribusiness is in *Starting a Value-Added Agribusiness: A Legal Perspective*, published by the Illinois Institute for Rural Affairs.

Given the broad topic area, there are many other resources available when working with agricultural operations, too many to list here. The information

below should provide a good base of information when getting started in any agricultural enterprises. If you have more specific questions, please give us a call at 1-800-346-9140.

### RESOURCES

CIRAS - Center for Industrial Research and Service

2272 Howe Hall, Suite 2620  
Ames, IA 50011-2272  
(515) 294-3420

8am-5pm, Central Time

email: [info@ciras.iastate.edu](mailto:info@ciras.iastate.edu)

Web site for Beef Business Manual from CIRAS

<http://www.ciras.iastate.edu/BeefManual/intro.html>

University of Wisconsin Extension

New Farm Options Web site : <http://www.uwex.edu/ces/agmarkets/starting.html>

*This site provides information on various farm business matters. The section of information on starting a value-added farm food business has numerous resources on business planning that should be helpful.*

Small Business Advancement National Center

University of Central Arkansas  
College of Business Administration  
UCA Box 5018

201 Donaghey Avenue  
Conway, AR 72035-0001

Phone (501) 450-5300

FAX (501) 450-5360

<http://www.sbaer.uca.edu/Resource/index.html#plan>

*Anders, Verlyn K. How to Write a Business Plan. Center for Industrial Research and Service. Iowa State University, Ames, Iowa. p. 73-138.*

<http://www.ciras.iastate.edu/BeefManual/sec2.html>

*Anon. Your Plan: A Step-By-Step, Start to Finish Business Plan Guidebook.*

Small Business Advancement National Center. University of Central Arkansas, Conway, AR 72035. <http://www.sbaer.uca.edu/Resource/yp13.pdf>

*Hanson, Mark. J. 2000. Starting A Value-Added Agribusiness: The Legal Perspective. Illinois Institute for Rural Affairs. Western Illinois University, Macomb, IL. <http://www.iira.org/pubsnew/>*

## Resources/Media

### TWO NEW OFFERINGS FROM CORNELL UNIVERSITY

*Small Farms Quarterly* is a project of Cornell's Small Farms Task Force; the Pro-Dairy Program; Cornell Cooperative Extension; CCE NWNYS Dairy, Livestock and Field Crops Program; the College of Agriculture and Life Sciences; and *Country Folks* magazine. Written for Northeast farmers and farm families, *SFQ* is intended to celebrate smaller-scale, family-oriented farming in the Northeast and to provide information that will benefit small farms and the environment. Current subscribers to *Country Folks* will receive *SFQ* four times a year at no charge. For \$5, you can receive just the four *Country Folks* issues containing *SFQ*. For information or to subscribe, call 888-596-5329, or e-mail [subscriptions@leepub.com](mailto:subscriptions@leepub.com).

Also from Cornell Cooperative Extension is the "Farmer's Facts Pocket Guide." Specially designed for New York, this handy guide includes information on climate, weights and measures, crops and soils, livestock, machinery and engineering, gestation tables, seeding rates, metric conversions, and much more. Guides are \$5 each, up to 19, and \$3 each for orders of 20 or more. To order, write: Dorene Beckhorn, CCE Allegany/Cattaraugus Counties, 5435A County Road 48, Belmont, NY 14813, or call 585-268-7644.

### TALK RADIO GOES "BEYOND ORGANIC"

A collaboration of the San Francisco-based organic PR firm Straus Communications, ENN.com, and radio producer Icicle Network has come up with a radio program to ramp up public

awareness of all things organic. "Beyond Organic" (<http://www.BeyondOrganic.com/radio>) broadcasts for one hour every Wednesday, distributed through Satellite radio, the Internet, and many local radio stations. Feature stories from "Beyond Organic" also air on the CBS radio network.

"Organic" is just a starting point for talking about issues of health, environment, and quality of life," says Michael Straus, president of Straus Communications. "[W]e've got to reach beyond the organic choir, taking organic-type information to the public without the insider jargon, buzzwords, and hype."

Weekly topics are announced by e-mail. For more information, or to sign up, visit the "Beyond Organic" Web site, or call 415-777-1170.

**Call 1-800-346-9140 today to receive your FREE copy of ATTRA publications, or visit our website at <http://www.attra.ncat.org>**

## New and Updated ATTRA Publications

### NEW

- **Protecting Riparian Areas: Farmland Management Strategies** – This publication is designed to help farmers, watershed managers, and environmentalists understand what healthy riparian areas look like, how they operate, and why they are important for the environment and society.
- **Considerations for Organic Herb Production** – This addition to our "Organic Matters" series replaces the publication *Herb Overview*. It covers research on both wild and cultivated herbs, with emphases on production and marketing techniques.
- **Organic Field Crops Documentation Forms** – The forms in this package are tools that farmers can use to document practices, inputs, and ac-

tivities that demonstrate compliance with the National Organic Program Regulations.

### UPDATED

- **Alternative Nematode Control**
- **Applying the Principles of Sustainable Farming**
- **Beekeeping**
- **Colorado Potato Beetle: Organic Options**
- **Foliar Fertilization**
- **Manures for Organic Crop Production**
- **Organic & Low-Spray Peach Production**
- **Organic Pear Production**
- **Organic Soybean Production**
- **Sorghum Syrup**

## USDA Implements Conservation Title Provisions

The EQIP, Farm and Ranch Lands Protection, Grasslands Reserve, and Forest Land Enhancement Programs all now have funds available for FY 2003. For information on these and other provisions of the 2002 Farm Bill, go to [http://](http://www.usda.gov/farmland)

[www.usda.gov/farmland](http://www.usda.gov/farmland), or check with your local National Resources Conservation Service office. Local NRCS office addresses can be found at <http://www.nrcs.usda.gov/contact/>, or in your local telephone book under "U.S. Government."

## AgEnergy Briefs

### Ultimate Recycling?

Give it up, medieval alchemy. Make way for Thermal Depolymerization, the process that its owners say can turn virtually anything with carbon in it into clean-burning gasses, purified minerals, and high quality oil. The process, patented by Changing World Technologies (<http://www.changingworldtech.com>) – and after three years of development at a demonstration plant in Philadelphia – has been put to the commercial test at a ConAgra turkey-processing plant in Carthage, Missouri, where it will process 200 tons of turkey beaks, bones, feathers, and innards every day. Its products, says Brian Appel, CEO of Changing World, will include 11 tons of recovered minerals and 600 barrels of the equivalent of #2 heating oil. "We are moving," Appel says, "to a carbohydrate economy." The company makes bold claims for its process, one of the more intriguing being the suggestion

*Continued on page 4*



Appropriate Technology Transfer for Rural Areas  
P. O. Box 3657 • Fayetteville, AR 72702  
1-800-346-9140  
1-800-411-3222 (Spanish only)

A project of the National Center for Appropriate Technology

### AgEnergy Briefs - continued from page 3

that mobile, one-ton per day units could be economically feasible.

#### *Wind-Energy Carousel*

For the past two years, Doug Alexander, owner of Energy Transfer Corp. in Sun River, Montana, has been developing a new windmill design that he believes may drastically change how farms and rural businesses see wind-

generated electricity — literally. Unlike most wind turbines, with their propellers and cowlings like something off a retired Beechcraft, Alexander's design resembles a gigantic carousel, with vertical panels in place of painted ponies. Twenty-six feet tall and 61 feet in diameter, the High Output Generator (HOG) uses 8'x16' panels to catch the breeze, regardless of its direction. And unlike

conventional wind generators, the HOG sits low to the ground, making it, Alexander says, less hazardous to birds. You can see specifics about the HOG on the Energy Transfer Corporation's Web site, <http://www.energytransfercorporation.com/>.

## Web Update and User's Guide

Thanks to all of you who have been using ATTRA's National Sustainable Agriculture Information Service Web site, <http://www.attra.ncat.org>. Your response to the new site has been tremendous, and the comments we've received from users are helping us to improve the site's features. For all visitors to the ATTRA site, the following should be helpful:

**Topics and Publications.** This is where you will find ATTRA publications, other publications that we distribute, and links to additional resources in the various topic areas. Publications are cross-listed, so that "Organic Rice Production," for instance, can be found under both "Organic Farming" and "Field Crops."

**Search.** Type in a key word or words, hit search, and a list will appear of those publications and other documents containing the word(s). Since most ATTRA publications were written before this new search engine was put to use, we have had a few cases when

the "best" response to the key word(s) did not appear first. We're working to correct that, but the **Search** feature is still a valuable tool for finding what you want.

**Comments.** This popular feature has been very useful to us. However, please do not use it to submit research questions or requests for publications. Please call us toll-free at **800-346-9140**, and we'll be glad to take your questions personally.

**Problems?** If you are still unable to navigate the ATTRA site successfully, or if you have other comments, please let us know. You can contact us through the **Comments** box, by calling the toll-free number, or by e-mail to [jeffb@ncat.org](mailto:jeffb@ncat.org).

**Don't forget: you can now get ATTRAnews via e-mail.** To subscribe, look under **Newsletter** on the ATTRA Web site, call our toll-free number, or write to Paul Williams, editor, ATTRAnews, National Center for Appropriate Technology, P.O. Box 3657, Fayetteville, AR 72702.

### **ATTRAnews**

**Teresa Maurer,**

**ATTRA Project Manager**

**Paul Williams, ATTRAnews Editor**

**Gail Hardy, Art and Production**

**July-August 2003**

**ATTRAnews** is the bi-monthly newsletter of Appropriate Technology Transfer for Rural Areas. It is distributed free throughout the United States to farmers, ranchers, Cooperative Extension agents, educators, and others interested in sustainable agriculture. ATTRA is a primary source of information about sustainable agriculture in the United States. ATTRA is funded through the USDA Rural Business-Cooperative Service and is a project of the National Center for Appropriate Technology (NCAT), a private, non-profit organization that since 1976 has championed sustainable technologies and community development that protect natural resources and assist people, especially the economically disadvantaged, to become self-reliant.

