

Spring 2001 Conference Update

by Steve Lorenz

Edifying, nurturing workshops. A dynamic keynote speaker to stoke your activist fire. Wonderful local organic food wherever you go. Engaging fun for the children. A true, old-fashioned summer fair to help you relax. And people who share your concerns and are committed to growing healthy food and healthy communities.

Wherever this issue of *The Natural Farmer* finds you in terms of your yearly workload, chances are you're not thinking about the next NOFA Summer Conference. You should be.

Far be it from us to tell you what to think about or do, but if you come to the NOFA Summer Conference you'll save money, and you'll be guaranteed a great weekend just when you need it most. Whether you've been coming for years or you've never come, you'll want to set aside August 10-12 for the 27th Annual NOFA Summer Conference and Celebration of Rural Life. Registration forms will be mailed by May 1.

The theme for this year is "Growing Community," a wonderful pair of words coined by keynote speaker Cathrine Sneed, and visually translated by Chris Rawlings into a vivid logo that captures the magnificence of bees, who set a fine example of a working, growing community.

Founder of The Garden Project in San Francisco, an enormously successful program that brings prisoners and ex-prisoners into horticultural work, Sneed is an internationally known speaker on environmental and social justice and often shares the stage with Wendell Berry, a previous conference keynoter. She calls The Garden Project an example of how thinking small can have a major impact. The program began with few tools and fewer funds, but with land, work to be done, and people willing to do it. From these beginnings, the program now makes vital connections between those incarcerated, those recently released, and the wider community. The food from their gardens feeds lots of people—from low income seniors to diners at posh restaurants like Chez Panisse—

and feeds the soul of the participants. A talk by Sneed will be just what you need, come the stultifying heat of early August. For parents who want to see and hear the keynote without having to worry about their children, there's good news: Roger Tincknell, a Pioneer Valley children's song and storytelling treasure, will be performing to tickle the funny bones of the younger crowd.

The Natural Farmer editor Jack Kittredge is coordinating the Saturday evening debate, which poses the question, "Should any vaccinations be mandatory?" Are there certain vaccinations that are in the public interest for everyone to have or is such a requirement an example of government/medical field intrusion? What are the statistics relating to different diseases and their vaccinations? Are those against vaccinations merely technophobes, are they a public menace, or do they have the course of human history on their side?

Jack wants to have a doctor/scientist and a parent/consumer on each side, so that we have a healthy mixture of "facts" and passion. Dr. Bob Baldor, a family physician from Worcester, MA has joined the panel arguing that some vaccinations should be mandatory, but Jack is still looking to fill the panel spaces. If you have any suggestions, contact him at (978) 355-2853 or by e-mail at JACKKITT@aol.com.

The committee that helps make the conference happen has a few changes in store for those who've long been trekking to Hampshire College in Amherst, Massachusetts. Gone are NOFA Nibbles, those tasty eats available under the main tent, the profits of which went to the NOFA state chapter which prepared and sold

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2001 NOFA Summer Conference Keynote Speaker Cathrine Sneed

photo courtest Cathrine Sneed

USDA Publishes The Final Organic Rule: Certification Becomes Compulsory

Elizabeth Henderson

If you have not yet read the Organic Food Production Act (OFPA) and the regulations that go with it, better do it now. You will find the Rule at the National Organic Program (NOP) website: www.ams.usda.gov/nop <<http://www.ams.usda.gov/nop>>. The website is conveniently organized so that you can read the Rule itself without the hundreds of pages of explanations and answers to earlier comments.

From reading the regulations, it is clear that USDA has heard the voices of the organic movement, and that is a mark of progress. The final Rule is written in language that is familiar to those of us who have been certified by the NOFA programs. The National List gives the

names of materials that may be used along with stated limitations on their use. In response to the appeals from NE certification programs, the final Rule grants a one-time whole herd conversion process that will allow dairy farmers to feed organic grain only during the final 3 months. That is an important gain over the earlier version and will enable small dairies to afford conversion. The Rule also seems to close all loop holes that might have allowed GEOs, sewage sludge or ionizing irradiation to sneak into organic production. The NOP staff rewrote the definition of GEOs (renamed Excluded Methods for the purpose of this Rule), to match the definition adopted by the Organic Trade Association. Once accredited, all organic certifiers will be in reciprocity with one another.

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Letters to the Editor

Dear Jack:

Our recent experience trying to find qualified year round help for Hutchins Farm prompts me to suggest for a future issue of TNF the topic of farm employment, apprentices, developing farmers, or more precisely, who is the next generation of farmers? For the past five months, we have been looking for a moderately experienced farmer to join our vegetable production team. To date we have had only three serious inquiries. Most people appear to be looking for smaller, very manageable opportunities, CSA's of 2-10 acres, not production on a large scale such as our 40 acres of vegetables and small fruit, 10 acres of apples and a farm stand. As we age through our fifties, we recognize the need to build a sustainable future for our farm. What we thought of as a great opportunity, to join a sizable farm in a good market with an opportunity for ownership, may be seen as too big a step or too large a risk. To complicate our search further, Bruce Bickford, our devoted production manager for the past 12 years, has recently been presented with an opportunity to farm on his own in New Hampshire and will be leaving us. As we begin our 28th growing season, we are suddenly looking for a whole new team. Can we rebuild our model with the limited pool of interested "farmers"? Will we have to scale back the size of our operation? CSA's

The Natural Farmer Needs You!

The Natural Farmer is the newspaper of the Northeast Organic Farming Association (NOFA). All members receive a subscription as part of their dues, and others may subscribe for \$10 (in the US or \$14 outside the US). It is published four times a year at 411 Sheldon Rd., Barre, MA 01005. The editors are Jack Kittredge and Julie Rawson, (assisted by their kids), but most of the material is either written by members or summarized by us from information people send us.

Upcoming Issue Topics - We plan a year in advance so that folks who want to write on a topic can have a lot of lead time. The next 3 issues will be:

Summer 2001 - The Other Organic Systems -
Biodynamics and Permaculture
Autumn 2001 - Organic Landscaping
Winter 2001-02 - Farming and Families

Moving or missed an issue? The Natural Farmer will not be forwarded by the post office, so you need to make sure your address is up-to-date if you move. You get your subscription to this paper in one of two ways. Direct subscribers who send us \$10 are put on our data base here. These folks should send address changes to us. Most of you, however, get this paper as a NOFA member benefit for paying your chapter dues. Each quarter every NOFA chapter sends us address labels for their paid members, which we use to mail out the issue. We don't keep copies of these, and if you moved or didn't get the paper, your beef is with your state chapter, not us. Every issue we print an updated list of "NOFA Contacts" on the last page, for a handy reference to all the chapter names and addresses.

As a membership paper, we count on you for articles, art and graphics, news and interviews, photos on rural or organic themes, ads, letters, etc. Almost everybody has a special talent or knows someone who does. If you can't write, find someone who can to interview you. We'd like to keep the paper lively and interesting to members, and we need your help to do it.

We appreciate a submission in any form, but are less likely to make mistakes with something typed than handwritten. To be a real gem, send it via electronic mail (JACKKITT@AOL.com) or enclose a computer disk (3 1/2 inch size). We use a Macintosh G3 with Microsoft Word but can with only modest difficulty convert IBM disks as well. Also, any graphics, photos, charts, etc. you can enclose will almost certainly make your submission more readable and informative. If you have any ideas or questions, one of us is usually near the phone - (978) 355-2853, fax: (978) 355-4046

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Northeast Organic Farming Association

have become quite popular; will more conventional organic farms directed to a wider market be sustainable? What is the future of sustainable farms without the human resources to work them?

Gordon Bemis
Hutchins Farm
754 Monument St.
Concord, MA 01742
hutchfarm@earthlink.net

Dear Gordon,

As our members get older, more and more are facing the concerns you identify. I know that working as a farmer, at least in the northeast, pretty much eliminates the possibility that you will ever be able to raise enough capital to buy good land outright, much less all the improvements necessary to farm competitively. Development prices keep rising and putting the dream of ownership farther away. So what do young people interested in farming do? It is an excellent suggestion to focus an issue on "Passing on the Farm" in all its many manifestations.

Jack

Dear Jack, Julie and assistant kids:

I gotta tell you how much I appreciate "The Natural Farmer"! Every now and then, amongst all the over-rated, hyped cultural and material goods and services in our contemporary world (at least the highly developed part of it), one can find a genuine gem that shines of its own worth. Your newspaper is such a treasure. It seems to me that the depth and quality of the articles, most especially found in the supplements, has, in the last 2 or 3 years, become a great gift to us, its readers. I keep thinking what an opportunity you give the writers and thinkers of those articles; what a forum, without which, why write? So there's a circle of writers, researchers, and readers that you serve so well. I hope as your roles and work within NOFA change, that you at least keep this part of your work, for I venture to guess it would be sorely missed if you did not.

To a specific point in the latest issue — I have slowly come to the feeling and thought that to "feed the world", all the so many hungry people in far off corners, is not an ecologically sound objective. This objective only serves to further the transport of food over large distances at great cost to the environment, while at the same time possibly decreasing the

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Advertise in The Natural Farmer

Advertisements not only bring in TNF revenue, which means less must come from membership dues, they also make a paper interesting and helpful to those looking for specific goods or services. We carry 2 kinds of ads:

The NOFA Exchange - this is a free bulletin board service for NOFA members and TNF subscribers. Send in up to 100 words (business or personal) and we'll print it free in the next issue. Include a price (if selling) and an address or phone number so readers can contact you directly. If you're not a NOFA member, you can still send in an ad - just send \$5 along too! Send NOFA Exchange ads directly to The Natural Farmer, 411 Sheldon Rd., Barre, MA 01005 or (preferably) E-mail to JACKKITT@AOL.COM

Display Ads - this is for those offering products or services on a regular basis! You can get real attention with display ads. Send camera ready copy to Justine Johnson, 145 LaPlante Circle, Easthampton, MA 01027 and enclose a check for the appropriate size. The sizes and rates are:

Full page (15" tall by 10" wide)	\$240
Half page (7 1/2" tall by 10" wide)	\$125
One-third page (7 1/2" tall by 6 1/2" wide)	\$85
One-quarter page (7 1/2" tall by 4 7/8" wide)	\$65
One-sixth page (7 1/2" tall by 3 1/8" wide), or (3 3/4" tall by 6 1/2" wide)	\$45
Business card size (1 1/2" tall by 3 1/8" wide)	\$12

Note: These prices are for camera ready copy. If you want any changes we will be glad to make them - or to type set a display ad for you - for \$10 extra. Just send us

The Simple Pleasures of the Garden

Despite the pressures of modern life (or perhaps because of them) gardening is growing in appeal among Americans. Polls have long found it among the most enjoyable ways people choose to spend time, as well as a significant source of fresh fruit and vegetables in our diets. Today, with so much concern about pesticide residues on crops, food borne diseases, and genetic engineering of seed, many people are turning to gardening as a way to have more control over what their family eats. Certainly the best tasting and freshest, most nutritious food we can eat is that which we grow ourselves.

Nature's productive bounty is such that anyone with access to soil — whether in a backyard plot, held in containers on porches and in windows, or under some rubbish in a vacant lot down the block — can produce much of his or her daily food simply by gardening. At a time when vast industrial-scale collective farms were the norm in the Soviet Union, an astounding 1/3 of that country's food was produced in private gardens. What is it about this activity that appeals to so many, is so easy to do, and can be so productive?

While "Farming" is featured in our name and farmers among our leadership, we have more NOFA members who are gardeners than who sell what they raise. This paper has never spent a whole lot of ink on organic gardening because there is already a myriad of publications giving advice on the topic. But we thought it might interest readers to meet a few of the excellent gardeners among our number, and discuss a couple issues not so fully treated in other sources.

the text, any graphics, and a sketch of how you want it to look. Include a check for the space charge plus \$10.

Frequency discounts: if you buy space in several issues you can qualify for substantial discounts off these rates. Pay for two consecutive issues and get 10% off each, pay for 3 and get 20% off, or pay for 4 and get 25% off. An ad in the NOFA Summer Conference Program Book counts as a TNF ad for purposes of this discount.

Deadlines: We should receive your ad copy one month before the publication date of each issue. The deadlines are:

January 31 for the Spring issue
April 30 for the Summer issue
July 31 for the Fall issue
October 31 for the Winter issue

Contact for Display Ads: Send display ads with payment to our advertising manager, Justine Johnson at 145 LaPlante Circle, Easthampton, MA 01027. If you have questions, or want to reserve space, contact Justine at (413) 527-1920 or JJSL145@aol.com.

Disclaimer: The Natural Farmer cannot investigate the claims of advertisers and we don't vouch for anything advertised here. Readers are expected to exercise due caution when inquiring about any product or service. Different NOFA chapters have different standards for fertilizers, for instance, and a product acceptable in one state may be prohibited in another. Please check with your chapter when in doubt. Remember, however, that advertisers are helping support the paper and, when appropriate, please support them.

NOFA Exchange

New York CSA seeks vegetable grower and assistants. Still Point Community Farm currently serves 165 shares and a local farmers market in southeastern NY, with potential to expand. Beautiful rural location, yet only 90 miles from New York City. Good soil, 20+ tillable acres, biodynamically managed for 3 years. Salary commensurate with experience. Contact Nathaniel or Susan farmernat@mohawk.net or (845) 373-8010

Apprentice Wanted: Small certified organic farm seeks apprentice for 2001 season. Farm produces a wide variety of items, including seedlings, greenhouse tomatoes, 2-3 acres of vegetables and our own honey, eggs, wool and angora. Tasks to include working along farmer in all facets of operation - planting, weeding, harvesting and attending busy farmers market. You can also learn how to cook on a woodstove, braid garlic, make pickles, jam and wreaths, and spin wool. Non-smoker gets her own living quarters (snug trailer), shares two meals a day, shower and laundry, and must have a genuine interest in sustainable agriculture. Stipend of \$125 for a five day week; also paid NOFA conference registration and opportunity to attend various farm tours. Train to Boston minutes away. Call Jacqui at 978-874-0244.

Farm Coordinators Wanted - Pickering Creek Audubon Center located in Easton, MD is seeking two Farm Coordinators to run demonstration farm. 125-share Community Supported Agriculture program will grow to 300 shares in 4 years. 75-acre hay operation serves specialty markets. Other enterprises slated to come on line. 380-acre facility is managed to educate farming and non-farming audiences. Skills in organic crop production, marketing and farm business management required. 22K plus housing and benefits. Couples encouraged to apply. Contact Alan at 410-822-4903 or agirard@pickeringcreek.org for complete announcement and application instructions.

Farm Workers Wanted: Organic farm seeks 1 full time and 1 half time worker. We are a four acre intensive cut flower and salad /vegetable farm, located on Martha's Vineyard. Workers will be responsible for all types of farm labor (i.e. arranging floral bouquets, planting, seeding, weeding, harvesting, processing, preparing salad dressing ...). On site housing provided in converted barn, with kitchenette, composting toilet, and outdoor shower. The full-time position pays \$175 weekly plus bonus if season is completed. Farm season runs from May 1st through September 30th. The half-time position is 25 hours of weekly work in exchange for housing and stipend. Also need full-time child care person (housing provided too). We are looking for highly motivated, physically (and emotionally) sound, hard working, fun (and children) loving people. Experience helpful but not necessary. Please contact Rebecca Miller, 4 North Tabor Farm Rd., Chilmark, MA 02535. Phone # 508-645-3311; email rmiller1@capecod.net.

Drumlin Farm Education Center and Wildlife Sanctuary, Lincoln, MA, **seeks Summer Day Camp Teacher/Naturalists** to provide hands-on farm and nature experiences for children 4 - 14 on a 232-acre organic farm and wildlife sanctuary. Topics include gardening, animal care, and ecology. Resources include vegetable gardens, farm animals, and a diversity of natural landscapes. Applicants must be available 6/11 - 8/17/00, have experience with children and knowledge of / interest in farming / natural history. Must be able/willing to work cooperatively in a busy camp community. Contact Hannah Freedberg, Camp Director, Drumlin Farm, Lincoln, MA 01773; (781) 259-9506 x7725; hfreedberg@massaudubon.org

Birdsfoot Farm and intentional community is looking for **1-2 veggie partners** that want to share management and teach organic farming and live in intentional community in way upstate New York. Our 4 acres have been certified organic for 15 years, diverse marketing, ready to expand. Profit of partnership is \$6-7 per hour in recent years. We are five adults and two kids, and have an alternative school on the land. For more information, call or write Dulli at 315-386-4852, 1263 CR 25, Canton, NY 13617.

Farmer/Educator - Certified 25 acre organic farm is seeking a full-time year round farmer/educator. Qualifications: 2 to 4 year degree in the field and/or equivalent experience in agriculture, with carpentry and mechanic skills, who loves teaching and working with people. Computer skills a plus. Position available March 1. Send resume and cover letter to NCOF, Lynda Simkins, 117 Eliot Street, Natick, MA 01760 or e-mail us at ncof@aol.com.

Opportunities at Holcomb Farm CSA, West Granby CT. Our 16 acre CSA serves households and social service organizations in the greater Hartford area. We also provide an on farm education and work experience for at-risk youth 1) **Asst. Farm Manager:** Coordinate produce harvest, distribution, and record keeping, and will assist with all activities required for crop production. 2) **Internships:** Participate in all aspects of organic vegetable production on a mechanized farm and help coordinate youth and member activities. For more information contact Paul Bucciaaglia, The Hartford Food System, 509 Wethersfield Avenue, Hartford, CT 06114 ph (860)296-9325, email csamanager@hartfordfood.org

Apprentices Wanted. Sisters Hill Farm is a non-profit CSA owned by the Sisters of Charity. Our mission includes outreach to the poor and environmental justice. Last season, on less than 2 acres, we grew 35,000 pounds of quality vegetables, supporting a 100 member CSA. We contributed more than 8,000 pounds to local charities. Apprentices will have exposure to six local organic/biodynamic farms through our apprentice training and education program. We offer housing on the farm, a stipend of \$800/month, and farm produce. We will hire a summer apprentice and a full season apprentice. Contact David Hambleton for further information. (845) 868-7048. PO Box 22, Stanfordsville, NY 12581. shfarm@earthlink.net

BCS tractor: 10 h.p. one-cylinder diesel ; one owner, all paperwork; **30" tiller**, brand new set of tines & Quick-Hitch tang; **50" cutter bar w/ brush & grass blades**, new teeth on both, & Quick-Hitch tang Many spare parts...\$1350 for all, Erik 518-329-0891; ewbdoodle@Juno.com Ancram, NY (Columbia County)

Internship and 2 work exchange positions available at the Abode Farm for the 2001 season. Established in 1975, we grow 4 acres of organic mixed vegetables, strawberries, flowers, and herbs. The farm supplies the residents of the Abode (a 50 person intentional community with Sufi leanings), in addition to a small CSA. Housing (with indoor plumbing!) and meals are provided, and intern receives a stipend. We also participate the CRAFT program. The Abode is in the Berkshire area, and has 400 acres of land with woods, trails and swimming pond. Contact Sarah Westwind, 199 Chair Factory Rd., New Lebanon NY 12125, (518) 794-8546, westwind@capital.net

Help wanted: Need help on established certified organic produce farm in Salisbury, CT. Two days a week through the growing season. Produce is marketed mainly through a self-serve roadside stand. Around four acres of vegetables but farm is 100 acres with some livestock. Call (860) 435-0693 or e-mail gwhitbeck@snet.net.

Internships available at Road's End Farm. Small-scale diversified organic fruit and vegetable operation. Beautiful Finger Lakes rural area. Farmers' market, growers' cooperative, on-farm sales. Opportunity to learn wide variety of skills. Experience not required, enthusiasm and willingness to work are. Room, board, in some cases stipend available. No television; lots of books and wild conversations. Season is early May to early November; shorter and longer terms considered. Rivka Davis, Road's End Farm, 362 Smith Road, Dundee, NY 14837; 607-243-5234

NOFA/Mass **certified organic chicken** — \$3.00/lb., **certified organic pork** — \$4.00 - \$4.50/lb. CSA shares available at \$400 for 20 weeks. Contact Jack or Julie at Many Hands Organic Farm, 978-355-2853, Email jackkitt@aol.com

Blow Your Own Horn!

Thanksgiving Farm CSA **seeks apprentices** for the 2001 season. Our 17-acre organic farm in nestled in the Catskill Mountain region of New York State and raises fruits and vegetables for a 150 member CSA. We are part of The Center for Discovery, an organization dedicated to creating vibrant life experiences and educational opportunities for severely disabled children and adults. The apprenticeship runs April 1 through Thanksgiving and includes; a \$500 a month stipend, on-farm housing, produce, wood-fired breads, and membership in our natural foods co-operative market. The Catskills wilderness surrounds and NYC is only 2 hours away. To apply for the 2001 season contact us at (845) 794-0093 Extension 57 or Seth Kroeck, Thanksgiving Farm CSA, Box 840 - Benmosche Road, Harris, New York 12742, or email at farmer@sdtc.org.

Ithaca, NY. West Haven Farm grows 10 acres of certified vegetables, strawberries, and apples, all for direct markets. We are **seeking an assistant farm manager**, farm experience required. We provide \$8/hr plus benefits, you provide a great attitude, your own housing, and a willingness to work hard. Call Jen or John at 607/272-4636 or email resume to bokaer-smith@ev.ithaca.ny.us

Horticulture training internship. 40 hours plus a week in small organic garden. Help two gardeners working with disadvantaged youth in a horticultural setting. Internships run January 2nd - May 31st, June 1st - August 31st, or September 2nd - December 31st. Additionally, horticulture intern will work one day with the farm animals and early mornings in our therapeutic classroom setting. 7:30 am - 4:00 pm. Split weekends off. Small stipend and room & board possible. Call Jackie Ryan, Green Chimneys Farm Center, 914-279-2995, Ext. 158 or e-mail jryan@greenchimneys.org. EOE

Seeking lead teacher & k-8 teacher for earth literacy charter school. Ridge and Valley Unity Charter School, opening September 2001 with 90 students in the Blairstown, N.J. area, will offer an "outward bound"/camp-like environmental learning experience through an Earth Literacy curriculum model. Ideal lead teacher candidate will utilize strong mentoring, team building, and leadership skills to guide the development, design, and operation of this 90 student K-8 start-up public charter school. Willingness to spend significant time out of doors with students and staff required. K-8 teacher candidate would be willing to spend significant time out of doors with students in an experiential, multi-age setting. Alternate Route candidates with teaching experience considered. Please send resume and copy of NJ Supervisor Certificate by 2/23/01 to RVUCS PO Box 512 Blairstown, N.J. 07825 ATTN: Search Committee. For more info: www.ridgeandvalley.org

OPPORTUNITY! Farmer still needed. Prefer experience in commercial, organic vegetable production but willing to consider other. Year round, long-term possibilities, partnership/ownership. Farm could be shaped to meet your needs. Also looking for **greenhouse manager, field workers, retail sales help.** Write/call John Bemis, 754 Monument St., Concord, MA 01742 978-369-5041, e-mail: hutchfarm@earthlink.net.

Crew members wanted for organic land care business March-November. Established clientele in Concord-Lexington, Mass. area; car required. Skilled maintenance, planting, transplanting, pruning and fertilizing work using organic materials and methods. Full or part-time positions available. Previous horticultural experience desired. Contact Priscilla Williams, Pumpkin Brook Organic Gardening, 35 Turner Road, Townsend, MA 01469; phw@seedlingspecialist.com; 978-597-3005.

Timber Framing Workshop: Learn the traditional craft of timber framing and help build a new structure for THE FARM SCHOOL. Layout, cut, and raise a timber frame entirely with hand tools from local rough-sawn timbers. Friday May 25, 2001 through Monday May 28, 2001. A fee of \$300 covers 4 days workshop, 3 nights lodging, and all meals. Contact VAN & JOANNE DUROS @ PO Box 205 Petersham, MA 01366 (978) 724-3573 for more info and to register.

Live and Work on Organic Fruit and Vegetable Farm. LOCATION: Two hours from Washington, DC and Baltimore in foothills of Western Panhandle where PA. joins West VA. and MD. A pretty and swimmable river runs through it. QUALIFICATIONS: Non-smoker in good physical shape. Prefer vegetarians and those with driver's license; prefer start date in July and stay a minimum of 2 months; COMPENSATION: Room and board in new house and cabins plus salary and bonuses. CONTACT: Call Mike to set up a visit at 301 587-2248; please fax resume and relevant information or questions to 301 587-7535.

Newly organic **wild blueberry farm business** in Heath, MA interested in exploring options with potential **interns** for 2001 growing season. Contact Dave at 413-337-5340 or davegott@hotmail.com

Apprentice opportunities at River Brook Farm, PO Box 2, Cochection, NY 12726. Wild and scenic waterways area on Delaware River. May through October preferred. Enjoy beautiful natural area, hawks and eagles can be observed while you gain experience on small but diversified certified organic vegetable farm selling to local markets. No experience necessary, but applicant must be willing to work all facets of farm with long work days. In addition to the vegetables are goats, sheep, emu and chickens. We offer room and board as well as access to farm vegetables and a stipend. Many river activities are available. Send resume to address above. 845-932-7952

Cohousing community forming in New London, CT area. Participate in planning, design, and management of your community. Contact Ellen Anthony at 860-437-8826 for more information.

Wanted: Farmer for 20 acres of mineral-rich land with ample manure (sheep, horse, poultry) close to NYC farmers markets & restaurants. Raised beds lying fallow waiting to be planted to vegetables or specialty crops. Living quarters available for approx. \$600/month. Land use for barter. Come see this gem in the mountains of the beautiful Hudson Valley: Cold Spring, NY. Mary at 845-265-2665, fax 265-1053

Apprentice sought for 2001 — Natural Roots is a diversified small farm/homestead. We raise five acres of mixed vegetables, cover and forage crops, a flock of sheep, beef cattle, and hogs. All farm and woods work is done with our team of Belgian work horses. Our products are marketed at a farmers market, local restaurants, and grocers, and through a CSA. Work is six days per week, ideally May through October. Accommodations are quite rustic - a platform tent with outdoor kitchen. Some meals shared. Small monthly stipend plus all you can eat farm produce. Call David, 413-369-4269

Internship Position: Wild Roots Farm - 110 acre diversified farmstead and 7 acres organic vegetables grown for 100 member CSA. Homesite with young orchard, swimming pond, chickens, Icelandic sheep, Highland cow and lush forest. Interns will have the opportunity to learn CSA marketing, organic vegetable production, off the grid living, blueberry gorging, and natural history. We are 10 minutes from the Catskill Forest Preserve, and 1/2 hour from the Delaware River. We are looking for 2 interns with a passion for learning experientially. Intern cabin, stipend and veggies provided. Amy and Wes Gillingham, 669 Cattail Road, Livingston Manor, NY 12758. 845-439-4799

Farm Manager needed by spring at Holly Hill Farm in Cohasset, MA. This is a full-time, year around position at a small, NOFA certified organic, privately owned farm starting its third year. Housing available. Individual or couple welcome to apply as a second job being open a possibility. Must be experienced organic grower with ability to interact with the public and strong commitment to the "community farm" concept. Call Frank or Jean White at 781-383-6965 to receive detailed job description and information about the farm and/or send letter and resume to Holly Hill Farm, 226 Jerusalem Road, Cohasset, MA 02025 by February 15, 2001.

2001 Position Available: **Assistant Farm Manager/Horticultural Therapist** - for two acre certified organic farm, which serves as a therapeutic and vocational training site for homeless men and women. Assist farm manager in all aspects of seedling and crop production, from mid April through mid October. Previous experience working with special needs populations preferred. \$460 per week salary (pre-tax). Applicant must be a city of Boston resident, or willing to relocate for the duration of employment. Send resume and cover letter to: Jean Claude Bourrut, Long Island Shelter, PO Box 158, Boston, MA 02122

Stearns Organic Farm, on 5 acres in Framingham, MA, is an 80-member CSA now in its 8th season.

It has been a diversified organic vegetable, flower, herb and small fruit farm for the past 50 years. We are **seeking one intern** for April through October to assist with all aspects of the farm's production. Work includes greenhouse propagation, field preparation, planting, tending, harvesting and marketing for 3 acres worked intensively without large equipment. A candidate must have the ability to work cooperatively with others, be physically fit and have an interest in sustainable agriculture. A stipend, farm produce and weekday lunches will be provided. Housing negotiable. Contact: Laurie Daly-Evans, 881 Edmonds Road, Framingham, MA 01701. 508-877-0059, email: lauriedick@RCN.com

Mad Mares Farm, a CSA outside New Haven CT **seeks interns** for March - November, 2001. We have a 100 member CSA on 1/2 acre. We use organic practices to raise a wide variety of vegetables and herbs, mainly by hand. Interns work in all aspects of the operation. In exchange for four days work per week, interns receive private room and full vegetarian board. Part time work and recreational opportunities available. Mad Mares Farm, 329 Downs Rd., Bethany, CT 06524. (203) 393-9553 Email: goutremont@snet.net

Apprenticeships and classes in herbal medicine, shamanism, homeopathy, crystals and more! The Boston School of Herbal Energetics offers excellent, certified courses. We have comfortable classrooms, over 100 species of medicinal plants in our gardens, and exciting and experienced instructors — all of this in the middle of Boston! Urban agriculture and medicine that belongs to the people are essential for our future. In Cuba much of the food and medicine for all is grown in Havana in community gardens. We teach it all — sowing the seeds of health. We will also offer trips to Cuba in the future. 24 Kenton Road, Jamaica Plain, MA 02130-3319. 617-524-5377. Fax: 617-983-2888, Email: mpatpalm@earthlink.net. <http://www.herbalenergetics.com>

Farm Help Wanted Responsible person or couple wanted to help retiring farmer with morning and evening animal chores (no milking at the moment), maintenance, small amount of hay making et. al. on small-scale Bio-dynamic/organic farm in Wilton, New Hampshire. Housing available in small 2 bedroom cottage on farm starting in June. Many work and financial arrangements possible depending on skill and interest of helpers; could also include other paid work in the area. Please send description of skills, interests, availability and needs to TRAUGER AND ALICE GROH, 135 Temple Road, Wilton, NH 03086, Tel/FAX 603 654-6316, email: tgcadmus@jlc.net

Wanted: Food Vendors for NOFA Summer Conference. This year, instead of running a NOFA Nibbles snack booth itself, NOFA will authorize private vendors to sell food and drinks during the conference, August 10 - 12, 2001. Products, as much as possible, should be organic, local, nutritious and reasonably priced. Vendors should have a \$1 million liability policy with a rider naming NOFA and Hampshire College, and contact Bernard Kirchner at 413-229-3306.

News Notes

compiled by Jack Kittredge

FDA Ignored Roundup Ready Soy/Allergy

Link. Monsanto published data in March 1996 which "shows that, relative to conventional soy meal, raw Roundup Ready soy meal contained 27% more trypsin inhibitor, a potential allergen that interferes with protein digestion and has been associated with enlarged cells in rat pancreases." Apparently the FDA ignored the troubling data in allowing the soy on the market as a human food. *source: Los Angeles Times, January 7*

EPA Phases Out Diazinon. The Environmental Protection Agency, 40 years after the product was registered for use, has begun phasing out the insecticide diazinon. Finding it "one of the leading causes of acute insecticide poisoning for humans and wildlife," sales for indoor use will end in December of 2002, and home use in 2003. Seventy percent of agricultural use will still be permitted, however. *source: The Ecological Landscaper, Winter, 2001*

Phthalates Indicted in Developmental Problems.

A class of industrial chemicals called phthalates (pronounced tha-lates), widely produced in plastic food packaging as well as a large number of common products, toiletries, and clothes, have recently been studied by the US Center for Disease Control. Some phthalates mimic estrogen while others interfere with androgen. In lab animals, some caused birth defects and altered sexual development. One phthalate, di-(2-ethylhexyl) (DEHP) accounted for over 80% of those measured and is about 10 times as potent as the others. Some organic growers have expressed concern about continuing the use of plastics in packaging organic products. About a billion pounds of phthalates are produced every year by the chemical industry. *source: Rachel's Environment & Health Biweekly, #708*

Cabbage, Watermelon Yields Higher Under Compost Than Fabric Mulch.

Researchers report that trials of compost vs. polypropylene landscape fabric vs. nothing have favored compost for both yield and labor evaluation. For cabbage, compost averaged yields of 12% over control, compared to 16% below control for fabric. On watermelons the respective figures were 43% better for compost, with fabric equivalent to control. Labor calculations for all methods included bed preparation, laying mulch, planting and weeding. Compost averaged about 2.5% more labor than the control on cabbage, and 33% more for fabric. On watermelons, the numbers were 6.5% more for compost, and 26% more for fabric. The research was conducted by scientists from Marist College and the Cornell Cooperative Extension. *source: American Journal of Alternative Agriculture, Volume 15, Number 4*

Corn Gluten Meal A Natural Herbicide. Iowa scientists are studying the use of corn gluten meal to control weeds as an alternative to synthetic herbicides. Different levels of application of the meal were tested for weed control and seedling survival. At high levels of application, weeds were reduced by 84%, but average seedling survival also declined by the same amount. The test involved crops planted as seed, however, so the researchers theorize that crops planted as seedlings would be ahead of the game. *source: American Journal of Alternative Agriculture, Volume 15, Number 4*

Violet Color Engineered into Carnation.

Florigene, which bills itself as the world's leading flower biotech company, has launched Moonshadow, a violet carnation, in the US market. "Colors in the blue spectrum - violet through to blue - don't normally exist in many types of flowers" said the Australian company's CEO, Peter Molloy. Anxious to correct this omission of the creator, Mr. Molloy announced the move at the Super Floral Show in Kansas City. "There is a huge demand for novel products in the global flower market," he said. *source: Florigene press release*

Fertilizer Manufacturing Executive Jailed for Endangering Worker. Allan Elias, the Idaho owner of a fertilizer manufacturing plant, has received a jail term of 17 years for ordering an employee to clean out a storage tank without protective gear. He was also ordered to pay \$6 million in restitution to the victim, Scott Dominguez. Mr. Dominguez was ordered into a 25,000 gallon tank which had contained cyanide and phosphoric acid, to clean out the sludge at the bottom. After chipping at the sludge and flushing it with water, he was overcome by hydrogen cyanide gas and suffered permanent brain damage. The sentence is the harshest ever given for an environmental crime. Prosecutors had called for a harsh sentence, arguing that Elias was a sophisticated businessman, having graduated from the Wharton School at the age of 19, and receiving a law degree. Regulators who testified at his trial said he had a history of flouting environmental and worker-safety laws. *source: Our Toxic Times, December, 2000*

Rotenone Linked to Parkinson's. Long term exposure to the botanical pesticide rotenone, which is regulated for use in organic growing, may kill brain cells and trigger the symptoms associated with Parkinson's disease, research published in the December issue of *Nature Neuroscience* suggests. *source: Growing for Market, December, 2000*

A few farm numbers. Since 1984, the price of food purchased in a grocery store has increased 2.8%, but the farmer's share of that decreased by 37%. In 1956, Americans spent 18.6% of their income on food, compared to 9% today. The farmer's share of each food dollar has dropped from 41 cents in 1950 to 20 cents in 1998. *source: Growing for Market, December, 2000*

Congress Holds Off on Gutting Irradiation Label.

The food irradiation industry has been seriously hurt by consumer resistance to food products which have been exposed to radioactive sources in order to kill bacteria and prolong shelf life. The treatment often causes food to lose qualities such as taste, nutrient value, and appetizing texture, say many consumers. So the industry has been pressuring Congress to allow a "friendlier" label on irradiated products than the currently required "irradiated" or "treated with radiation." They have suggested such labels as "cold pasteurized." But Congress has now extended until next fall any decision on easing the label requirements. *source: Food & Water Journal, Fall, 2000*

GMO Vegetables on Horizon. Most genetically engineered crops so far have been the commodity crops — soy, corn, canola. Only a few engineered vegetables have been commercialized, and then usually under license to large growers. But that situation is about to change. As early as this year you may see 'Attribute' Bt sweet corn from Novartis, 'Freedom II' squash from Seminis, 'Endless Summer' tomato from DNA Plant Technology, and 'Seed Link' radicchio. Still in the pipeline are dozens of varieties. Applications for field trials, and some of the traits sought, are listed below:

- Carrots - 13 applications for herbicide tolerance, fungus resistance, nutritional quality;
- Corn - 2821 applications for pest and herbicide resistance;
- Cucumber - 24 applications for disease resistance;
- Eggplant - 8 applications for Bt;
- Lettuce - 62 applications for herbicide and disease resistance;
- Melon - 138 applications for disease resistance, ripening qualities;
- Onion - 3 applications for disease resistance;
- Pea - 19 applications for reduced starch;
- Pepper - 12 applications for disease resistance and altered ripening;
- Potato - 726 applications for pest resistance, increased solids, etc.;
- Squash - 67 applications for disease resistance;
- Tomato - 521 applications for Bt, increased solids, longer shelf life, ripening qualities.

source: Growing for Market, December, 2000

FDA Proposes Non-Rule on GMOs. On January 18, the FDA released two proposed policies on genetically engineered food. In one, they require food producers to notify them 120 days before putting a new biotech crop on the market. The notice must include the specific antibiotic resistance marker used, mention of new substances introduced into the food, and data comparing it to conventional food. No safety tests are required, however, any industry consultation with the FDA on safety is entirely voluntary, current GE foods on the market are exempt from the notice requirement, and current and future GE foods are also exempt from environmental review. The second policy suggests guidelines for any producers who want to voluntarily label their products as containing GE ingredients. The only stern regulatory language in the release is reserved for producers of food who do not use GE ingredients. Such foods, the FDA declares, must not use such labels as "GE-free" because they would be "misleading." Apparently the level of contamination already existing from transgenic pollen, and the fact that threshold levels have not been established, means any claim that a food is superior because it has been produced without GE technology is misleading by default. The comment period on these rules lasts until April 3, 2001. Refer to docket numbers 00N-1396 and 00D-1598. The text of the policies is available at www.accessdata.fda.gov/scripts/oc/ohrms/advdisplay.cfm. *source: Virginia Biological Farmer, 1st Quarter, 2001*

Germans Ban Bt Corn. The German government has revoked the license of Novartis to grow genetically modified Bt corn, based on the fact that the engineering uses a marker gene making the cells resistant to the antibiotic Ampicillin. The German biotech industry called it "a depressing decision". *source: MFA Digest, Fall/Winter 2000-01*

Starlink Debacle Prompts Biotech Companies to Ask for Modified Labeling. The contamination of much of the US corn supply with a genetically modified variety (Starlink) suited only for animal feed has led the American Seed Trade Association to push for "standards that would allow a small amount of genetically engineered materials in bags of seeds and still have those seeds considered free of modification." The group asked for this "tolerance" because "it is virtually impossible to ensure that a bag of non-modified seeds does not have a few genetically modified ones mixed in. Insisting on absolute purity would bog down the world seed trade." Japan, the largest buyer of American corn, has refused shipments contaminated by Starlink. *source: Alternative Agriculture News, December, 2000*

Organic Reduces E-coli Risk. According to a UN Food and Agriculture Organization (FAO) report, (and contrary to erroneous things you may have heard on the 20/20 TV program) organic practices can actually reduce the risk of e-coli infection and other contamination in foods. The full report is available from www.fao.org/organicag/frame2-e.htm *source: Ohio Ecological Food & Farm Association News, Fall, 2000*

GE and GE-free Brands on Internet. The environmental organization Greenpeace has developed a True Food Shopping List. The "Red" list shows GE foods, the "Green" List shows GE-free brands. A "Yellow" list shows products made by companies which are in the process of eliminating GE ingredients. The list is available at www.truefoodnow.org/shoppinglist.html. *source: Maine Organic Farmer & Gardener, December, 2000*

EPA to Cap DDT Dump in Ocean. The largest US Superfund site is 2 miles off the coast of Palos Verdes, California. It is a 17 square mile area where 100 tons of DDT was flushed into the ocean from the sewers into which the Montrose Chemical Corporation dumped it. The dumping was legal at the time, says the company. Nevertheless, the EPA is suing for hundreds of millions of dollars to pay for capping the site in an effort to prevent further contamination of marine life. *source: Pesticides and You, Fall, 2000*

US Organic Acreage Up. US organic crop acreage doubled during the 1990s, from 403,000 acres in 1992 to 850,000 acres in 1997. The complete report is posted at www.ers.usda.gov *source: Eco Farm & Garden, Fall, 2000*

God Joins Anti-GMO Movement. Emissaries of the Almighty have recently spoken out against genetic engineering. On November 11, Pope John Paul II urged extreme caution concerning GE food, stating that ag biotech "cannot be evaluated only on the basis of immediate economic interests. It is necessary to subject it in advance to rigorous scientific and ethical checking to prevent it ending up in disaster for...the future of the earth." On November 14, the Commission of Social Action of Reform Judaism called on the government to "monitor the health, ecological and religious liberty implications of genetic engineering." Not to be outdone, the Protestant United Methodist Church recently called for mandatory labeling of GE foods, with pre-market safety testing. Spokesperson Jaydee Hansen said: "We call for policies that encourage the gradual transition to sustainable and organic agriculture." Say, wasn't that how it all started out in the garden, anyway? *source: Biodemocracy News, January, 2001*

Biotech Influence in the New Administration

When Bill Clinton was president, it was an open secret that his government favored agricultural biotechnology and actively promoted it as a potential US global money-spinner.

But the strength of the genetically modified food lobby in George Bush's new cabinet, and its links with the GM global leader, Monsanto, are greater than anything that came before, it has emerged.

The secretaries of defense, health and agriculture, the attorney general and the chairman of the House agriculture committee all have links with the firm or the wider industry.

The most active GM advocate is expected to be attorney general John Ashcroft, who received \$10,000 from Monsanto in the recent elections, the most the company gave to any congressional candidate. Mr. Ashcroft led calls to the Clinton administration to promote GM crops in developing countries and to persuade Europe to accept them.

Tommy Thompson, the former governor of Wisconsin and now secretary of health and human services, has been given overall responsibility for food safety, pharmaceuticals and the Food and Drug Administration, which licenses biotechnology in the US.

Mr Thompson is a GM supporter and has accepted money for his campaigns from Monsanto. He used state funds to set up a biotech zone and was one of 13 state governors to launch a campaign, partly funded by Monsanto, to persuade Americans of the benefits of GM crops.

Ann Veneman, the new agriculture secretary, was a director of the GM company Calgene, now owned by Monsanto, and has been active in world trade talks which would favor US companies exporting GM crops to developing countries.

Donald Rumsfeld, the defense secretary, was president of Searle Pharmaceuticals when it was bought by Monsanto.

Larry Combest, a Texas Republican who will chair the powerful House of Representatives agriculture committee, received \$2,000 from Monsanto in last year's elections. He is known as a strong supporter of GM food.

Clarence Thomas, the judge whose vote for Mr. Bush in the supreme court helped decide the election, was a Monsanto lawyer from 1977 to 1979. His views on GM are not known.

Charles Lewis, director of the Centre for Public Integrity, said: "It looks like Monsanto and the biotechnology industry has the potential to bring undue influence on the new government."

A spokesman for the British charity Christian Aid said: "This does not bode well. We should be proceeding cautiously with GM. We fear even greater pressure on poor countries to introduce the technology, to the detriment of poor farmers and consumers who may further lose control of their food security."

BETWEEN THE FURROWS

Plowing the Fertile Factual Fields of Corporate Agribusiness
An AGRIBUSINESS EXAMINER Supplement
by A.V. Krebs, Editor/Publisher

AGRIBUSINESS:

"The term agribusiness means more than just owning and cultivating the land to raise crops and livestock (agriculture production). The term also refers to the financing of agriculture and the manufacturing, transporting, wholesaling, and distribution of farm machinery, fertilizers, chemical poisons, seed, feed and packaging materials (agricultural inputs). Agribusiness also manufactures, processes and markets food (agricultural outputs)."

— A.V. Krebs, The Corporate Reapers: The Book of Agribusiness

CORPORATION:

"That inglorious device for obtaining individual profit without individual responsibility."

— Ambrose Bierce, The Devil's Dictionary

1999 SALE REVENUES:

TOP TEN CORPORATE AGRIBUSINESS CORPORATIONS

[Company, rank among all U.S. public corporations, sales revenues]

1. WAL-MART STORES (2)	\$ 165.0 BILLION
2. PHILIP MORRIS COS. (9)	\$ 61.7 BILLION
3. BANK OF AMERICA (11)	\$ 51.6 BILLION
4. KROGER (13)	\$ 45.3 BILLION
5. AMERICAN INTERNATIONAL GROUP (16)	\$ 40.8 BILLION
6. PROCTER & GAMBLE (18)	\$ 39.1 BILLION
7. ALBERTSON'S (22)	\$ 37.4 BILLION
8. SAFEWAY (40)	\$ 28.8 BILLION
9. DU PONT DE NEMOURS (46)	\$ 26.9 BILLION
10. CONAGRA (54)	\$ 24.9 BILLION

SOURCE: FORBES 500S - Ranking the Top U.S. Companies,
FORBES, April 17, 2000

1999 FOOD DISTRIBUTOR LEADERS

BASED ON PERCENTAGE OF RETURN ON CAPITAL

	5-YR. AVERAGE	LATEST 12 MOS.
ALBERTSON'S	9.7%	9.1%
BRINKER INTERNATIONAL	11.5%	15.1%
CASEY'S GENERAL STORE	10.3%	10.0%
DARDEN RESTAURANTS	8.8%	14.7%
JACK IN THE BOX	19.4%	22.1%
MCDONALDS	12.7%	13.0%
OUTBACK STEAKHOUSE	25.8%	24.4%
PERFORMANCE FOOD	11.4%	10.0%
ROYAL AHOLD	8.3%	5.7%
SAFEWAY	8.4%	12.7%
SUPERVALUE	10.9%	9.1%
SYSCO	16.4%	18.5%
WENDY'S INTERNATIONAL	10.7%	12.0%
WAL-MART STORES	16.4%	15.9%

SOURCE: FORBES: America's 400 Best Big Companies.
FORBES, January 8, 2001

TOP FIVE U.S. GROCERY RETAILERS

1997	2000
Kroger Co.	Kroger Co.
Safeway	Wal-Mart
American Stores	Albertson's
Albertson's	Safeway
Ahold USA	Ahold USA

SOURCE: Pacific Crest Securities, January 8, 1999,
Supermarket News, January 24, 2000

1999 FOOD, DRINK & TOBACCO COMPANY LEADERS

BASED ON PERCENTAGE OF RETURN ON CAPITAL

	5-YR. AVERAGE	LATEST 12 MOS.
ANHEUSER BUSCH COS	15.0%	16.8%
BROWN-FOREMAN	19.7%	19.5%
CAMPBELL SOUP	34.2%	42.3%
COCA COLA	40.7%	17.7%
H.J. HEINZ	15.8%	19.5%
HORMEL FOODS	14.9%	17.3%
MCCORMICK & CO.	15.7%	23.4%
PEPSICO	15.6%	20.1%
PHILIP MORRIS	24.7%	30.9%
PILGRIM'S PRIDE	12.5%	11.5%
SARA LEE	19.9%	31.9%
SMITHFIELD FOODS	11.4%	7.7%
UST INC	89.9%	75.8%
WILLIAM WRIGLEY JR.	28.3%	27.4%

SOURCE: FORBES: America's 400 Best Big Companies.
FORBES, January 8, 2001

TOP TEN PRIVATE COMPANIES

INVOLVED IN CORPORATE AGRIBUSINESS

[Rank, Rank among all U.S. private corporations in parenthesis,
1999 revenues, businesses]

1. (1) CARGILL	\$48 billion
International marketer & processor agricultural & industrial commodities	
2. (2) KOCH INDUSTRIES	\$36 billion
Oil, chemical, minerals, energy, environmental technology, ranching	
3. (4) MARS	\$15.3 billion
Makes candy, ice cream, meals & pet food, processes rice, electronics	
4. (7) PUBLIX SUPER MARKETS	\$13 billion
631 supermarkets in Alabama, Florida, Georgia & South Carolina	
5. (9) CONTIGROUP COMPANIES	\$10 billion
Process poultry, pork & beef, mills flour & feed	
6. (11) MEIJER	\$ 9.5 billion
General merchandise & grocery stores in the Midwest	
7. (15) HE BUTT GROCERY	\$ 8.2 billion
H-E-B & H-E-B Pantry Food stores, milk plant & bread bakery in Texas	
8. (17) ARAMARK	\$ 7.1 billion
Food & support services, uniforms, child care & development services	
9. (18) C & S WHOLESALE GROCERS	\$ 7.1 billion
Wholesale food to supermarkets, retail stores & military bases	
10. (21) ALLIANT EXCHANGE	\$ 6.5 billion
Distributes food to restaurants, hotels, hospitals & other facilities	

SOURCE: FORBES: 500 Biggest Private Cos.,
FORBES, November 27, 2000

1999 TEN LARGEST COOPERATIVES (AGRICULTURE & HARDWARE)

	REVENUES
1. FARMLAND INDUSTRIES	\$ 10.7 BILLION
2. DAIRY FARMERS OF AMERICA	\$ 7.6 BILLION
3. CENTEX HARVEST STATES	\$ 6.3 BILLION
4. LAND O'LAKES	\$ 5.6 BILLION
5. WAKEFERN FOOD	\$ 5.5 BILLION
6. TRUSERVE	\$ 4.5 BILLION
7. TOPCO ASSOCIATES	\$ 3.6 BILLION
8. ASSOCIATED WHOLESALE GROCERS	\$ 3.3 BILLION
9. ACE HARDWARE	\$ 3.1 BILLION
10. UNIFIED WESTERN GROCERS	\$ 2.9 BILLION

SOURCE: National Cooperative Bank, Washington, D.C.

TEN WORST CORPORATIONS OF YEAR 2000

Each year the Multinational Monitor [founded by Ralph Nader] publishes its annual list of the Ten Worst Corporations of the Year. www.essential.org/monitor/monitor.html Appearing on the Year 2000 list are:

Aventis: Making Human Guinea Pigs

The biotech company recklessly raced its genetically modified StarLink corn to market. Not approved for human consumption, StarLink soon found its way into the food supply (through Taco Bell shells and other food items), through cross-pollination with conventional corn crops, improper mixing in grain elevators or otherwise. Critics say StarLink corn poses serious allergenic risks, including fever, rashes and diarrhea.

BAT: Smuggler of Death

Industry documents uncovered in connection with the U.S. state litigation against the tobacco industry reveal that British American Tobacco for decades promoted and facilitated a worldwide cigarette smuggling scheme, with extensive efforts in Latin America and Asia. Cigarette smuggling evades excise taxes — lowering cigarette prices and increasing smoking rates.

BP/Amoco: Lawbreaker

The oil giant which likes to portray itself as environmentally responsible paid major fines and entered settlements in 2000 for illegal disposal of hazardous waste, alleged Clean Air Act violations, and underpaying royalties for oil produced on federal and Native American lands.

DoubleClick: Cookie Crook?

DoubleClick is rubbing up against the edge of Internet privacy protections, having acquired the ability to match consumer information from web usage and purchases — mostly gained without consumer knowledge or informed consent — with consumers' names and addresses.

Ford/Firestone: Reckless Homicide?

Ford and Firestone placed the lethal combination of Ford Explorers and Firestone tires on the road, leaving the deadly mix on the road even after they had overwhelming evidence of the consumer hazard.

CORPORATE AGRIBUSINESS INDEX

According to USDA figures compiled by Daniel Wood, Christian Science Monitor:

* Nearly 20% of the world's food now comes from city-based farms, averaging anywhere from one to 20 acres.

* The average distance between food in the field and the dining room where it is eaten is 1,500 miles.

* Refrigerating, transporting, and storing this food causes an expenditure of energy eight times greater than the value of the food itself.

* In terms of calories, it takes eight calories of energy to produce and deliver one calorie of food 1,500 miles.

* Spinach and other green leafy vegetables can lose as much as 50% of their nutrients in five days.

According to Business Week's annual survey:

* U.S. executive pay in 1999 continued to grow at an out-of-this-world rate, the average CEO of a major corporation made \$12.4 million in 1999, up 17% from the previous year or 475 times more than an average blue-collar worker and six times the average CEO paycheck in 1990.

* American companies are paying CEO's better than anywhere else in the world, not 10% or 20% more, but 1,000 percent more and then some.

* According to Towers Perrin's 1999 Worldwide Total Remuneration report, German CEO's make 13 times what the average manufacturing employee makes & in Japan, the CEO-to-worker pay ratio is just 11-to-1.

Preliminary data from Thomson Financial Securities Data reports that:

* Mergers and acquisitions worldwide surpassed \$3.4 trillion in 2000 eeking out a 3.5% increase over 1999's total and producing, the eighth consecutive record year for the continuing M&A expansion.

* With three (weekend) days to go before 2000 drew to a close, total volume of M&A deals announced around the world reached \$3.409 trillion, compared with \$3.293 trillion in 1999.

* In the U.S., announced mergers managed to rack up a total of \$1.766 trillion, up 12.9% over 1999's total of \$1.564 trillion. While the increase reversed a 3% decline in U.S. merger volume the previous year, the total number of announced U.S. deals fell to 10,658 from 11,042 — the second straight year in recent memory the number has dropped.

USDA figures show that:

* U.S. fruit production fell 10% in 1999, declining for the second consecutive year.

* Between 1992 and 1997, the number of U.S. farms with land set aside for orchards and vineyards declined by nearly 10,000, or 13.5%, to 106,069.

* The state with the largest loss was California, where nearly 2,300 farms disappeared as the number of acres devoted to fruit production increased.

* USDA has overestimated the amount of farm land that was developed between 1992 and 1997 by 30% and blamed faulty software for the mistake. It initially reported that nearly 16 million acres of farm land were converted to development between 1992 and 1997 — a rate of 3.2 million per year. The correct figure is 11.2 million acres, a development rate of 2.2 million acres per year.

* Between 1982 and 1992, the annual conversion rate was 1.4 million acres a year.

* The U.S. had 98 million acres of developed land in 1997, about 6.6% of the nation's non-federal land.

* About 25% of the non-federal land is farmed. More than half is in rangeland or forests.

Public Campaign's Author Blank reports that:

* Price tag for Bush-Cheney inauguration: \$30 million.

* Portion coming from private contributions: 100%.

* Cost of a table at any of three candlelight dinners on January 18 that President-elect George W. Bush and Vice President-elect Dick Cheney visited: \$25,000.

* Maximum contribution that the Bush-Cheney Presidential Inaugural Committee accepted from private donors: \$100,000.

* Number of donors who gave a total of \$100,000 or more to parties and candidates in the 2000 elections awarded positions on George W. Bush's Transition Advisory Teams: 14.

* Amount that Bush's Energy Department Secretary, Spencer Abraham, received from energy industry donors in his failed 2000 Senate race: \$366,298.

* Rank of Abraham among all current senators in contributions accepted from energy industry donors in the 2000 elections: 1.

* The number of industries that Bush's nominee for Attorney General, John Ashcroft, ranks in the Senate top ten for contributions in the 2000 elections: 42, many of which have anti-trust and other matters pending before the Justice Department.

Phillips Petroleum: Deadly Employer

A massive explosion at a Phillips Petroleum plastics plant in Pasadena, Texas in March killed one person and injured 74. It was the third fatal accident at the sprawling petrochemical complex in the last 11 years, including a 1989 blast that killed 23 people and an explosion in June 1999 that left two dead.

Glaxo Wellcome: Patents Over People

With the HIV/AIDS crisis at least as severe as the Black Death which wracked Europe in medieval times, Glaxo Wellcome and other drug manufacturers persist in engaging in a variety of tactics to block African and other poor countries from making available cheap generic versions of lifesaving AIDS drugs.

Smithfield Foods: Pig Out

To the detriment of family farmers, Smithfield Foods is rushing to consolidate control of the meatpacking industry, most recently with a proposed merger with IBP Inc. While wrecking havoc on the farm economy, the big hog companies are also destroying farm country. The rapid growth of factory farms and the resulting mountains of untreated livestock manure are fouling drinking water supplies and causing a public health risk throughout the United States.

Lockheed Martin: Testing Its Pollutant on Humans

The Los Angeles Times reported in November that on behalf of military contractor Lockheed Martin, Loma Linda University is conducting the first large-scale tests of a toxic drinking water contaminant — a rocket fuel component — on human subjects.

Titan International: Union Buster

Approximately 1,000 United Steelworker of America (USWA) workers at two Titan facilities have struck the maker of agricultural, off-road and construction tires, wheels and assemblies since 1998. The viciously anti-union Titan CEO Morry Taylor responded to a National Labor Relations Board unfair labor practices complaint by reportedly telling the Natchez Democrat that "I figure in five years they'll get that to the first federal court. By that time they'll all be enjoying retirement pay."

(The full story, "The Ten Worst Corporation of the Year," is posted at www.essential.org/monitor/mm2000/00december/enemies.html)

FARM PRICE SQUEEZE

Farmers get only a fraction of the price consumers pay for produce.

Item	Price paid	Retail price	Price spread to farmers
Carrots (1-pound bag)	\$0.16	\$0.49	206%
Potatoes (10-pound bag)	\$0.64	\$1.91	198%
Tomatoes (per pound)	\$0.57	\$2.22	289%
Iceberg lettuce (each)	\$0.43	\$0.99	130%

SOURCE: Western Growers Association. Week ending November 17, 2000

Readers of THE AGRIBUSINESS EXAMINER are reminded that the newsletter can be found at the Corporate Agribusiness Research Project's web site on the Internet: www.ea1.com

Dan Glickman, Outgoing USDA Secretary, Says Agency's Top Issue Is Genetically Modified Food

According to a story by Bill Lambrecht, of the St. Louis Post-Dispatch, Ann Veneman, the new Secretary of Agriculture, faces various problems as she takes office. The moist pressing of these is what to do about genetically modified food. Veneman served on the board of Calgene, a company owned by Monsanto. Along with the keys to his office, says Lambrecht, the departing U.S. secretary of agriculture, Dan Glickman, gave advice about biotechnology to the Californian who replaced him.

Get ready, he said, for a full-throated debate about genetically modified food that awaits you when you walk in the door.

"Biotechnology is going to be thrust on her, as Dick Cheney would say, big time. Whether she wants it or not, it will be on her, like it was on me, big time," Glickman said, mimicking the voice of the new vice president during an interview with the Post-Dispatch.

The advice from Glickman and others has been mostly friendly. On her way to speedy confirmation, Veneman endured none of the ideological warfare that greeted some of Bush's appointees - notably John Ashcroft as attorney general and Gale Norton as interior secretary.

Indeed, Veneman's confirmation hearing had the tenor of a Farm Bureau ice cream social. Senate Agriculture Committee members refrained from grilling her, all but ignoring biotech and other upcoming headaches that Glickman warned about.

Veneman sailed into her new job offering little more than bromides about common sense and cooperation: "The hard-working men and women who provide our food and fiber have been tested by low prices, bad weather and other adversities," she said, giving little indication as to how she will proceed.

More than a few Midwesterners, members of Congress among them, groused initially that Washington's top farm job went to a lawyer from California rather than to a farmer from the nation's breadbasket.

But even her detractors couldn't dismiss Veneman's experience. She was the No. 2 Agriculture Department official in the administration of Bush's father a decade ago and she headed California's agriculture agency for a four-year period afterward. Veneman, 51, is the easy-going daughter of a peach farmer, with a knack both for policy and for charming senators.

She may need her winning ways to handle farmers skeptical both of her and the direction of the nation's farm policy. They worry that she is too aligned with the agriculture establishment to depart decisively from the Freedom to Farm policy, a deregulation effort that drove down crop prices to the lowest level in a generation.

Skeptics also wonder if she will aggressively regulate genetically modified crops and foods after having served on the board of Calgene, a California-based biotech operation owned by Monsanto Co.

The discovery last fall of adulterated Starlink modified corn in the food supply laid bare the gaps in the U.S. regulatory system. The scorching news accounts showed, too, how unanticipated problems can threaten consumer confidence in a new technology.

As a result of Starlink, Veneman will be pressed more quickly to answer vexing questions:

* How can widespread DNA testing be incorporated into an emerging two-track food system - one that is genetically engineered and one that is not?

* What kind of rules and liability might be established in cases of wind-blown pollen from genetically modified crops?

Charles Kruse, president of the Missouri Farm Bureau, didn't plant Starlink corn this year. But he has planted other varieties of corn engineered for insect resistance, and he believes that the future of farming lies in genetic engineering. He expects Veneman to be aggressive, he said, in answering the technology's critics.

"There are some people who would have you believe that we should stop anything remotely connected with genetically enhanced crops because we're going to have a monster tomato," he said.

Bill Christison, of Chillicothe, Mo., president of the National Family Farm Coalition, is a leading critic of American farm policy. He said he was prepared to give Veneman a chance, but his views are exactly opposite that of Kruse on modified crops.

Christison wants the Department of Agriculture to stop promoting genetically modified seeds, which he insists have done farmers more harm than good. "There's no reason we need this kind of technology at this juncture in time. People around the world aren't accepting genetically modified food, and the government ought to stop propping up these biotech crops," he said.

Veneman must decide if she will be cheerleader or regulator of genetically modified crops. Glickman grew uneasy playing both roles at the same time.

The Department of Agriculture is one of three federal agencies splitting the task of regulating food biotechnology under a system that has changed little since the mid-1980s. The Environmental Protection Agency and the Food and Drug Administration share the duties.

The Agriculture Department decides which genetic experiments on crops can take place outdoors. It also oversees field trials by companies before gene-altered food reaches the market.

Despite the department's regulatory role, the biotech industry and many farm groups have expected it to be a promoter of genetically modified food. Often it was, even helping to develop the "Terminator," the controversial genetic technology that renders the seeds of crops sterile in order to force farmers to buy new seed.

In the interview, Glickman recalled the boosterish climate. "What I saw generically on the pro-biotech side was the attitude that the technology was good and that it was almost immoral to say that it wasn't good because it was going to solve the problems of the human race and feed the hungry and clothe the naked," Glickman said. "And there was a lot of money that had been invested in this, and if you're against it, you're Luddites, you're stupid.

"There was rhetoric like that even here in this department. You felt like you were almost an alien, disloyal, by trying to present an open-minded view on some of the issues being raised. So I pretty much spouted the rhetoric that everybody else around here spouted; it was written into my speeches," he continued.

In 1999, with European resistance to modified food mounting and a de facto moratorium on new approvals of crops taking shape on the continent, Glickman broke ranks. He had grown concerned that the U.S. government was pushing genetic engineering without taking stock of consumer worries. American farmers, he worried, could be left in the lurch.

In one speech, at Purdue University, he asserted that the United States "can't force-feed consumers" around the world. In another speech, delivered at the Press Club in Washington, Glickman advised biotechnology companies to consider labeling genetically modified food to help prevent consumer fears from spreading to the United States.

That was not what the heavily invested industries - or the White House, for that matter - had expected him to say. He purposely had not submitted his speech for approval beforehand, he recalled, because he knew it would be returned to him "sterile." Afterward, he felt the heat.

"There were some people in this government who were very upset with me. Very upset. They thought that I had changed our trade policy unilaterally. Like a lot of politicians, I wanted to be loved. So I was very worried about it," Glickman said.

A few days later, after encountering the president's wife, Hillary Rodham Clinton, at a state dinner in the White House, he breathed easier. Glickman continued the story:

"She said, 'I saw the story about your speech in the New York Times.' I said to her, 'There were some people in the White House that didn't like it'. She said, 'I liked it.' So I knew I wasn't going to be fired."

Glickman thinks the federal agencies that regulate modified food ought to get together soon for what he called "a thorough review of how GMOs (genetically modified organisms) are regulated by our government. I think it does need further clarity."

Veneman has not said publicly how she will proceed. Some of her past actions in Washington may offer clues. In 1992, as deputy agriculture secretary, she announced further streamlining of field-testing requirements that the biotech industry wanted and that skeptics considered deficient.

In 1998, testifying as California's agriculture secretary before a Senate subcommittee, she uttered the mantra offered by the government and industry justifying resistance to mandatory labeling. "Risk should be evaluated in terms of product, not the production method," she said with regard to genetically modified food.

Michael Phillips of the Biotechnology Industry Organization says that his trade group is hopeful, based on what members of Bush's transition team told him in private meetings. Noting Glickman's independence, Phillips said he hoped that Veneman operates in lock step with the White House, where he wants to see a strong figure in charge of biotech policy.

"They did not coordinate well. ... It seemed like the left hand did not know what the right hand was doing," he said of the outgoing administration.

Neil Harl, director of Iowa State University's Center for Agriculture and Rural Development, ranks genetically modified food at the top of his list of serious problems facing agriculture. He predicts that the future of food biotechnology - whether it becomes dominant or occupies a much smaller role - will be known in three to five years.

Harl sat on a high-profile advisory committee put together by Glickman to give him advice on biotechnology. He has not heard whether it will continue but does not expect it to.

An early test for Veneman, he said, will be her decision on licensing the "Terminator" technology; the Agriculture Department co-owns the patent with a Mississippi seed company.

He will be looking, too, for what role, if any, Veneman takes in revamping the government's oversight. "I think that cooler hands and sounder minds understand that we need to take a new look at how we regulate GMOs," he said.

Special Supplement: Home Gardening

Compost: Anarchy in the Garden

by Jeff Ashton

I hesitate to make the following disclosure: not because it will implicate me in some sort of unlawful activity, or because it reveals an embarrassing past that I'd successfully hidden when I moved to this land of lovely gardening weather. No, the reason I'm reluctant to come clean is that it will provide further evidence of my essentially selfish nature. Nevertheless, here is my confession: I dance for joy when torrential rains ruin newly mown hay, as it lies prostrate in the fields of the valley where I live.

It shames me, to a certain extent, to admit this fundamental weakness in my character, because I know that farmers need a premium-quality crop of hay in order to gain even what little money they can hope for from their efforts. That's why farmers watch the weather so closely, and cut hay seldom gets rained on.

I mention this perversion of joy in the face of others' loss only because it strikes to the heart of any good composting program. Eliot Coleman, the Warrior God of organic gardening, calls composting "anarchy in the garden," because we take ruined, discarded, no-good-for-anything organic matter and turn it into the best stuff we can lavish on our gardens. It is alchemy of the finest sort.

Last fall, at the Carolina Farm Stewardship Association's Sustainable Agriculture Conference, I was inspired when Mr. Coleman, the keynote speaker, recommended that gardeners spend about half of their time making compost. I don't think I've ever invested more than 5 percent of my overall gardening effort in compost production. In light of the Master's words, though, I spent the winter reconsidering my own gardening priorities.

My own compost system consists of rows of bins made of discarded wooden pallets, in two different areas of my yard. But no matter how much compost a gardener makes, it's never enough. And the biggest challenge for any dedicated gardener is to find enough raw materials to turn into compost. Last fall, I made a number of tactical strikes on curbside piles of bagged leaves, to augment what I get from the trees in my immediate neighborhood. Leaves are free, and they make great compost, but it seems to take a couple of years to get them to the optimum stage. And mono-compost (i.e., compost made from only one bulk material, by gardeners too lazy to chase down other compostables) just doesn't cut it, if you're looking for the diversity of nutrients and microbial activity needed for a high-performance, organic garden. I layer semi-composted leaves into my compost bins, to add diversity and further enhance soil structure.



Compost: The gardeners black gold!

Folks who compost aggressively are always on the lookout for raw materials. "Scrounge consciousness," as I call it, is an acquired skill requiring the gardener to reconsider various materials, mentally shifting them from the "trash" category to the "free potential compostables" rubric. A trip to the barber-shop, for example, should always include a request for hair swept up during the day. A stop at Bruegger's should always include a request for spent coffee grounds. And you'd be surprised by what organic matter the manager of the veggie section of your local grocery store has thrown away, on any given day. Be forewarned, though: Initial attempts to secure free composting material from businesses will often end in embarrassment for gardeners who aren't prepared to get what they ask for. A trash bag stashed in your back pocket and produced at the opportune moment will have you on your way with your treasure before anyone else knows you're making off with what they consider appropriate only for the landfill.

But scrounged compost materials, though important, are only small potatoes, considering how much bulk you need for a properly layered compost pile. An effective compost program requires a large amount of carbonaceous material that composts quickly, is available at reasonable cost, and gives us the end product we want. When I lived in southern New England, I harvested truckloads of seaweed that piled up on certain accessible beaches after storms. Now, however, living far from the coast, my raw material of choice is hay. Purchased in the field, it is

worth the cost for a truckload (alfalfa bales are ideal, if you can get them, because of their high nitrogen content).

But merely buying the bulk material of choice at normal cost isn't good enough for gardeners with a keen sense of scrounge consciousness. Each summer, I watch the newspaper for listings of "mulch hay" — a euphemism for ruined hay (usually damaged by rain) that can't be fed to livestock. Three years ago, I hauled away four truckloads of the stuff from a nearby farm in our valley; it was a mess to handle, but it was dirt cheap, and it made some of the nicest compost that has come out of my bins in years. It also made killer mulch for the veggies at Jardin Fou.

The bitter pill for me to swallow, though, is that I can no longer get my bulk compost materials for free. This is why I dance for joy when rain ruins hay in the field. And I've even come to rationalize my behavior, as follows: If rain on mown hay is an act of God, then feeling joy in the anarchy of turning trash into treasure becomes a religious experience.

Surely, worse things have been done in the name of religion.

Jeff Ashton tends his organic garden in the Reems Creek Valley, north of Asheville. Readers may send questions or comments to Jeff, care of the Mountain Xpress: publisher@mountainx.com.

Gardening for the Year with Karen DiFranza

by Jack Kittredge

The hills of central Massachusetts do not provide a welcoming habitat for garden plants. Their elevation is close to 1000 feet and their thin soils contain many rock outcroppings, making the area more like New Hampshire than the fertile Pioneer. Nevertheless, it is in Hubbardston, Massachusetts, that gardener Karen DiFranza choose to make her home. And Karen takes few things as seriously as raising her family's food!

"My grandmother gardened," she says remembering the little plot of Italian tomatoes and basil she saw as a little girl. "I didn't help her, but I remember seeing a program on TV when I was about 6 showing how you could cut a potato, plant it, and get other potatoes. For me that was an important experience."

Karen's interest in gardening emerged when she was a student at Smith College, in Northampton. She started spending time in the greenhouses there and loved it. When she graduated, she decided, she wanted to start growing her own food. At about that time she also read "Living the Good Life" by Scott and Helen Nearing, which only confirmed her own passion for raising food.

"There are two important things about gardening to me," she says, explaining its power in her life. "One is to enjoy the garden, being in it. It's such a personal endeavor! It's like a work of art. There are as many ways of gardening as there are gardeners. Two is to always be open to learning from the garden. A lot of what happens here is the result of several decades of experience and intuitive gardening. Its exciting to see the garden as a place of discovery!"

Karen gardened for 10 years before she ever grew a flower. She loved the way vegetables looked and thought that was beauty enough. But now, she admits, she does like the splashes of color flowers provide, and uses them liberally in her plantings.

"There is some method to it all," she insists. "Flowers in general I use not only because they are beautiful, but because they attract birds and bees. We get insect control and pollination. There are several sunflowers we left around the tomatoes, for instance, because we've had this terrible problem with tomato hornworms. I noticed that beds of tomatoes near sunflowers seem to have less hornworms. I infer that the little gold finches and others who are attracted to flowers for the seeds also have

a nice tasty worm while they are here."

One of the skills that Karen has learned to enjoy is seed saving. Currently she saves seeds from an antique blue corn, some flowers, and kale and lettuce which have made it through the winter — she figures such varieties are great for her cold climate.

She uses both soil blocks and boxes of soil to plant in. "Soil blocks are fantastic for transplanting," she says. "There's no shock so they keep on growing. But I've found that I get better germination in a flat than in a block. By necessity the soil in a block is compacted, so I think it is harder for a seed to germinate in it."

Karen starts all her seedlings inside. She and her husband, Robin Langer, laid the foundation for a small attached greenhouse, but it is not up yet. So DiFranza sets her seedlings out behind the 5 sets of sliding glass doors on the house's southwest side. That orientation isn't ideal, she concedes, but it does provide some light. She also runs seedlings out onto her deck and onto the greenhouse foundation in portable coldframes when the weather is right.

For fertility, Karen buys in compost made at a local egg farm, and mixed fertilizer, rock phosphate and green sand from the tri-state NOFA bulk order. She also makes her own compost with the bedding from their 2 or 3 goats, mixed with garden scraps. But a big contribution is also made by the family's chickens, which are housed all season in portable frames that DiFranza moves from spot to spot in the garden.

The pens are made from electrical conduit pipe with hardware cloth held to the pipe by nylon ties. The bottoms are open and the tops are wire. Tarps cover both top and sides, protecting against both rain and sun. Four to six birds can live comfortably in each pen, which one person can move. The chickens come in after frost, and then again in the spring, going from bed to bed to precede the planting.

Karen doesn't till the soil in her garden. She just adds compost and forks that in. "The idea," she says, "is that when you turn the soil you're disrupting the micro-organisms. They're happier and more productive when they're stable. Ruth Stout advocated this method of planting, and Scott Nearing learned it from Ruth Stout. Stuart Hill is a great proponent of not disturbing the micro-organisms.



photo by Jack Kittredge

Karen holds ground cherries in various stages of ripeness. From the bottom up: green, green/yellow, yellow, and finally a ripe ground cherry and its papery husk.

"A lot of people just use a broadfork instead of tilling," she continues. "Roto-tilling has a real problem: creating hardpan. We're on a small enough scale that we can do this. We do a lot of weeding in the spring, but I don't think we have more weeds than if we till."

DiFranza plants oats whenever she takes something out. She likes oats because they will winter kill, as opposed to rye which can cause problems in the spring if you don't till it in. Even though oats don't add nitrogen, they do prevent erosion during the winter. In the spring she just rakes them off or plants right into them and keeps the oats as a mulch.

"Oats will germinate right into November," she says. "You don't get a lot of growth, but you get enough. In the late summer they'll get a foot tall in a month. Sometimes I rake back the soil and broadcast the oats and cover them. Or if I have enough compost I'll cover them with that."

Other plants make good cover crops as well, Karen feels. One is chickweed. She doesn't let it stay in the beds when plants are small, but once they have grown a bit, she leaves the chickweed in as a ground cover. In the spring she just pulls it off in order to plant. She has also started leaving edible and medicinal weeds in the pathways, feeling it makes the garden a more vital place. Once they start to get into the beds, however, she removes them.

Of course some beds, like those which contained carrots or winter greens, are harvested so late no cover crop can get started there. Those beds, perhaps 50% of the total area, do require weeding in the spring. Karen is reluctant to mulch garden paths or beds with hay because she thinks it provides a place for pests to overwinter. Now she just leaves them open to the elements, and thinks that has helped lessen her flea beetle population.

She is also reluctant to use black plastic mulch, but finds it works to warm up the soil for tomatoes, peppers and eggplants. Sometimes she will use it on melons, but mostly she gets short-season ones. On her flowers, DiFranza uses cocoa mulch which she buys from the tri-state NOFA bulk order. It provides an absolutely rich color and fragrance, and is great for the soil.

Every year seems to bring a new set of problems, including pests, Karen feels. "We have plenty of pests," she admits, "but I wouldn't say we have them in excess. There's the old saying that you raise one for you and one for the critters. We let them take their share. Flea beetles are a big problem, of



photo by Jack Kittredge

The trellises in Karen's garden come out each year and are moved to a new location to help with rotations.

course. Potato bugs haven't been that bad. I try to get the eggs in June before they hatch. If I take that time to destroy the eggs, I find that the damage is minimal. I do about 150 bed feet of potatoes, two rows per bed. So it takes me awhile to pick the eggs off. I hill the potatoes and before I do that I go through and check the leaves out. I heard of one fellow who uses a car mirror on a swivel. He holds it down under the leaves and spots the eggs that way — less bending!

"We have some cucumber beetle problems," she continues. "But with the 3 ducks free-ranging and the chickens coming into the garden, we have fewer pests than we used to. I've never had a problem with cabbage moths before. But they're really going after my brassicas now. We had a whole family of rabbits in the upper garden this year. They would barrel right past the electric fence wires and were eating mainly the chickweed and the clover that I was leaving in the garden. That was fine with me. But then when the squash and pumpkins started blossoming, they decided they liked those. That was enough for me. I couldn't take it. We put a plastic chicken fence inside the electric wire fence. They can't chew through it because they would have to sit on the electric wire to do it."

Over the years Karen has put in a number of perennials. Right now she is getting raspberries, peaches, nectarines and plums, while still waiting for the apples to produce. As for annuals, the garden produces virtually everything you can grow at this



photo by Jack Kittredge

Chicken tractor (4 X 4 X 10) in Karen's garden, with squash growing over the top. This is an early design, built of wood. Robin built later, lighter ones using electrical conduit. This one goes into the garden in the fall and the chickens stay there until the spring. The door is for the chickens to take a stroll through the garden in the evening (depending on the state of the garden.) The nesting boxes go at the end.



photo by Jack Kittredge

Karen's pantry is stocked with preserved food, most of which she grew: garlic and onion braids, fruit leather, and a number of dried fruits and vegetables: strawberries, squash, broccoli, blueberries, tomatoes, peaches, peppers, eggplant, and ground cherries.

latitude, including potatoes, onions, garlic, carrots, beets, radishes, various tomatoes, standard and hot peppers, melons, cucumbers, squash, pumpkins, Swiss chard, kale, various lettuces, and lots of flowers.

One thing DiFranza is particularly happy with is her ground cherries. The plant is an annual in the potato/tomato family with sweet little fruits which come in husks. When the husks get papery the fruit is ripe. There's a tomato taste to it, but they're sweeter. They're a real gourmet item, but they're prolific and lend themselves well to drying.

Karen has two main gardens, each about 4000 square feet. One is by the house and the other is on a south-facing hill behind the house. Over the years both have developed shade problems, but Caleb, Karen's 15 year-old, has been wielding a busy axe this last year and is making headway on the problem. Between the two gardens, the family gets enough food for the entire year, plus extra to send home with the elder DiFranzas who often visit during the summer and help with the work.

For years Karen was frustrated by not being able to store her garden's harvest very well. She used various wet or dry and cool areas around the house. But finally she and Robin decided that, as part of an addition they were building, they would design a special food storage area — an unheated pantry off the entryway. Then they insulated between the house and pantry, and installed windows in the pantry which they can open to bring in outdoor air. Below the pantry, reachable via a trap door, is a root cellar.

"I try to keep it as cold as I can here without freezing," DiFranza says of the pantry. "I call this our interactive refrigerator. Early in the fall you take what you can get, but starting in late October we'll unplug our refrigerator and move everything in here. Every morning I'll check the temperature here and open or close windows to keep it around 40½."

"Every winter we'll have about a week where it gets too cold," she continues. "Ideally we'd have a vent opening to the house we could use to regulate heat going back in. Right now we just open the door. We also monitor the moisture, to keep it as dry as possible. It seems to do well in the high 70% range or lower. There's not too much you can do to get it drier, of course."

Karen picks fresh greens out of the garden right through until the solstice around Christmas. That's when they have their last salad. She also grows cold-tolerant lettuces which she mulches during the worst of the winter. Then, as soon as the snow is



photo by Jack Kittredge

Karen shows off some of her tomatoes. These are Principe Bourgese, from Fedco, which is a variety especially good for drying. She also raises several different varieties for fresh eating and for freezing.

gone in the spring, they can eat them as well as winter spinach. DiFranza also has mulched carrots and kept them in their beds over the winter, but she

finds that by early spring she gets vole and mice damage. So she now harvests them in the fall and puts them in her root cellar.

Rather than canning her paste tomatoes, which she feels destroys a lot of the taste as well as nutrients, Karen cooks them up with sautéed onions, garlic and peppers and then freezes them all together making a great base for sauce or soup. She also freezes a lot of greens.

Her favorite way of preserving, however, is dehydrating. "All I've read says freezing is superior to canning, and drying is superior to freezing," she asserts. "I think the texture of dried food is better than frozen. Something like blueberries come back with more integrity than frozen ones. And the flavor is more potent. We think the broccoli has a better flavor that way than frozen. You can use it as a side vegetable or in soups or casseroles just like it was fresh. One night a week I'll cut up dried tomatoes and peppers, rehydrate them by covering with boiling water for 10 minutes, and sauté them with onions and garlic. They're great! We did parched sweet corn last year and it was miraculous. It's so flavorful and has a nice texture, too!"

One of the primary purposes of Karen's garden, besides feeding her family, has been to give her a place to work with her three kids, now aged 19 to 11. They are homeschooled and the garden is one of the places which enables Karen to teach effectively. During planting season the children each probably put in about 10 hours a week, which is a significant amount of their time. It slacks off in the summer, but if they're harvesting something the kids can put in 10 hours in one day.

"They complain, but they know it's theirs," explains DiFranza. "They know they've made a contribution and ultimately, I think, they're pretty proud of themselves. I envision downsizing the garden when the kids aren't here, but I've also thought about maintaining it and having a small CSA. Marcella is only 11 so it's a while yet until that comes. I hope to be open to change, always. Change is part of the learning process."

Lunacy in Gardening

by Jeff Ashton

Ever since I was a kid, I've heard about the moon's influence on earthly activity. I think it's part of the nonstructured learning most people pick up willy-nilly, throughout their lives. One way or another, you come to hear such things as: More babies are born on days when there's a full moon than on other days; the ocean tides are highest during the full moon; asylums have more problems with residents during the full moon. Who knows whether any of these gems are really true; but it's clear that this anecdotal understanding of unusual, lunar-related activity pervades our society. Along the way, we also hear that some people plant their gardens by the phases of the moon – because, they say, it makes them grow better.

Despite my best intentions, I have never taken the time to plant according to what the almanac says, even though I generally buy at least one of the several available almanacs each year. To be perfectly frank, I've always felt a bit intimidated by the charts and astrological signs in the almanacs. And each sign is associated with a different part of the human body – what's that about? It all seemed somewhat confusing (and, in the end, I wind up planting and maintaining my garden according to the gaps in my hectic schedule, anyway). But I have noticed over the years that, sometimes, the same type of plant installed on different days would grow and produce differently. When every other factor is the same, yet there is a noticeable difference in plant vigor within the same bed, I have to wonder.

At the spring Organic Growers School a couple of years ago, I attended a workshop presented by Jack Pyle and Taylor Reece. These guys have written two books on the subject of moon-regulated gardening – *Raising with the Moon* and *You and the Man in the Moon*. In a nutshell, a moon-sign gardener plants in a “fruitful time” and not in a “barren time.” What really got me going at that presentation was the idea that all earthly activities can be timed to correspond to barren or fruitful moons. If you want your haircut to last longer, get it during a barren sign (which is also when you weed your garden). If you're starting any new endeavor, do it during a fruitful sign. Reece and Pyle spent 14 years monitoring moon phases, in relation to both plantings in their gardens and other activities. They maintain that more of their friends who divorced had been married under a barren sign than under a fruitful sign.

Planting by the moon is nothing new. The ancient Babylonians revered the moon goddess, Ishtar – known as the “green one” and the “all dewy one,” for it was she who sent the rain. The sun gives us warmth, but both the Romans and the Greeks believed that the moon symbolizes the life force. According to this view, the waxing moon brings an increase in life, while the waning moon signals a decrease in life force.

Francis Bacon conducted one of the earliest attempts at a scientific approach to planting by the moon. He had long been interested in the effects of the moon on the germination of seeds. He planted during all phases of the moon and observed that seeds sown after the new moon produced the best germination and the healthiest plants.

Five hundred years later, a biology professor – Dr. Harold Burr of Yale – drilled holes in trees and hooked them up to a voltmeter, to measure their electrical potential. He believed there must be a direct correlation between a tree's growth and its electrical output. But on studying the data, the only correlation he could find involving tree growth was with the phases of the moon.

At this point, it may be worth explaining how to tell the phase by looking at the moon. The moon waxes from “new moon” (i.e., no visible moon) to “full moon” and then wanes to new moon again. During the first two “quarters,” the waxing moon looks like a capital D in the sky (round side to the right). During the third and fourth quarters, the waning



moon looks like a capital C in the sky (round side to the left). The sequence, then, is new moon waxing (D) to full moon (O) to waning moon (C) to new moon (or “DOC,” to help you remember it).

Jeff Ashton tends his organic garden in the Reems Creek Valley, north of Asheville. Readers may send questions or comments to Jeff, care of the Mountain Xpress: publisher@mountainx.com

For 10 years, Dr. Lily Kolisco of the Biological Institute in Stuttgart, Germany, experimented with plants grown from seed sown during different moon phases. She found that above-ground plants (she grew celery, grains, cabbage, spinach, tomatoes, lettuce and beans) were more vigorous, tasted better and grew faster if sown during the waxing phase.

Here are the basics for moon-phase gardening: Plant above-ground plants and annuals during the waxing moon. Plant below-ground plants and perennials during the waning moon.

After that, it gets a bit more complicated. Each of the 12 signs of the zodiac, it is believed, will be influenced when the moon passes through that constellation. Cancer, Scorpio and Pisces are considered “fruitful” signs. Taurus, Capricorn and Libra are considered “semi-fruitful.” Leo, Gemini, and Virgo are the most “barren” signs. Aquarius, Sagittarius, and Aries are “less barren.”

When the moon is in barren signs, you should be weeding and cultivating. When the moon is in a fruitful sign, you want to be planting the crops best-suited to whatever moon phase you are in at that particular time.

Happily, my gardening pal Steve Rasmussen, down at the *Mountain Xpress*, has taken all the head scratching out of moon-phase gardening, for the rest of us. Each week on the gardening page, we get an almanac of the sun's and moon's movements through the signs of the zodiac, charted and plotted by Steve – who then determines what work should be done, according to the moon phase/position for the coming week. It is pretty darn painless to use Steve's chart, and I'm glad it's there. I was tickled today when I read his chart and realized that it would be a fruitful day with waxing moon – perfect conditions for planting the beans, basil and tomatoes with the kids. Laurel and I couldn't keep from weeding some today, though, and I wonder if the fruitful sign will do me in, making the next wave of weeds more vigorous than before. We'll see.

