



using  
our  
tools  
wisely.

the greenhorns

**GUIDE FOR  
BEGINNING  
FARMERS**

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“There seem to be but three ways for a nation to acquire wealth. The first is by war, as the Romans did, in plundering their conquered neighbors. This is robbery. The second by commerce, which is generally cheating. The third by agriculture, the only honest way, wherein man receives a real increase of the seed thrown into the ground, in a kind of continual miracle...as a reward for his innocent life and his virtuous industry.”

-Benjamin Franklin

## INTRODUCTION:



For many, the family farmer represents all that is good about America: self sufficient, productive, independent, hard-working, community spirited and accountable. Indeed most of our founding fathers were farmers- along with their wives, and servants who spent a good deal of time in agricultural production as well. As late as 1950 over 15% of Americans were farming. Today it is a mere 1.6%.

the greenhorns is a documentary film about the emerging young farming movement in America. At its core, a commitment to sustainable agriculture is a pledge of patriotism to the land that feeds us. We will not strip, poison or pollute the foundational resource of our country.

This is a guidebook and field guide aimed to support and further encourage new entrants to agriculture, whom we call "Greenhorns." This book, a compilation of existing resources, has been prepared to give an introduction to the various educational, governmental and other programs which serve to help new, young and beginning farmers start their business and farm.

If you are reading this because you are considering changing your career and entering agriculture, or if you are already an apprentice or journeyman farmer hoping to become owner-operator of your own farm, or if you are still a student hoping to design your own professional trajectory into agriculture-- we hope to give you a sense of what kind of expectations to hold about getting started with farming.

The good news is that ever-increasing numbers of young people are entering agriculture, and successfully. This means that they are able to pay the bills, support their families, and remain careful stewards of the land. Becoming a farmer is certainly not as 'clear cut' as becoming a doctor or a lawyer, or even a carpenter. But that hasn't stopped a growing, determined and wonderfully dynamic surge of new farmers from doing it anyway. What it does mean is that there is a certain level of professional improvisation—as you try to balance learning with earning. For many people this can mean periods of higher paid nursery work, or carpentry, a side job, a paid 'non-profit' salary or seasonal educational role. In some cases a partner might have an "off farm" income.

+ + +

For a more complete listing of resources go to our wiki at <http://foryoungfarmers.wikispaces.com/>. please have a look at our online young farmer mapping project and census. SERVE YOUR COUNTRY FOOD <http://census.greenhorns.net>. You can also watch our film "The Greenhorns" about the lives of young farmers across America, the trailer is online at [www.thegreenhorns.net/trailer](http://www.thegreenhorns.net/trailer).

## **II. APPRENTICESHIPS, MENTORSHIPS AND FARMER/AGRICULTURAL EDUCATION:**

In almost every farming culture around the world, farming was traditionally learned via the apprenticeship model. Essentially this means an exchange of your labor and time for the housing, food, and an intensive educational opportunity. In many cases there is also a small stipend or pocket money paid--usually not enough capital, however, to begin one's own operation. Therefore it is often the case that a farming career will move from apprentices, to farm-staff/management, and then eventually to farm management--not always ownership.

The trick is to figure out exactly what you want to learn, and configure your apprenticeship, or sequence of apprenticeships accordingly. In many cases your first farming experience will be the best way to answer those questions. Are you an animal person, a vegetable person, a cut flower person? At the end of the day at least some of your farm-design will reflect what you can best "sell" to make the finances work in your area. So, if you live near the suburbs, you might want to consider fresh vegetable shares in a CSA. If you are distant from a metropolitan area it might instead be livestock, potatoes, jam or other less perishable wares. It is also wise to consider what you most enjoy doing.

What does it take to make it as a farm apprentice, and eventually as a farmer? You must also be willing to work hard, be self-motivated, attentive and disciplined. You must be able to derive satisfaction from work that is not always adequately valued by the market economy. Just because your effort yields delicious food, doesn't mean that it will yield a retail price commensurate with that effort. It is important to be prepared for that reality, and not take it too personally. At the same time we can focus on advocacy efforts both locally and internationally to change this equation that has haunted farming for the past century.

Often those coming from a non-agricultural background are not quite prepared for the discipline of farming-- of the careful handling of equipment, the extra precautions with animals, or the need for constant observation. These things are quickly learned on a farm, almost through osmosis--but expect to work hard, and outside of the physical labor, take notice to the goings on of the farm's business, management, maintenance, planting schedules etc. There will be weeding and somewhat monotonous work--but it will be purposeful, and will likely give you a chance to do some deep thinking, planning, and digesting.

Education is neverending. If you have already gone through the apprenticeship process, there are still many options for continuing learning in a structured and planned manner. Farming courses are often helpful not just for their content but provide a forum for information exchange between participants. Extension services often produce materials useful for setting up the processing/cooperative marketing/disease management aspects of farming.

# Apprenticeship/Internship Network Sites

ATTRA - National Sustainable Agriculture Information Service  
<http://attrainternships.ncat.org>

Organic Volunteers- find on-the-job learning opportunities in sustainable and organic agriculture by place through clicking on a map of US and Canada  
<http://www.growfood.org>

Sustainable Living and Farm Jobs- an international directory of jobs in “sus-tainable living”  
<http://www.backdoorjobs.com/farming.html>

Stewards of Irreplaceable Land- links Canadian farmers willing to take on and train apprentices with folks wanting to work and learn on an organic farm using sustainable practices.  
<http://www.soilapprenticeships.org>

World Wide Opportunities on Organic Farms (WWOOF)- become a member and access an extensive international list of organic farms that welcome volunteer help (any where from a couple days to years) in exchange for room and board. This is a wonderful way to cheaply travel around in rural areas abroad, there is a limit to how much you can learn on a farm over the course of two weeks, and from a farmer with such a brief working relationship--but its a grrreat “first step” in agriculture, and may very well provide clues about which aspects and type of farming is most appealing to you. Its also a great way to explore crops that don't grow near you. However be prepared if things with your host do not work out: Get the train schedule in case you have to make a quick departure!  
<http://www.woof.org>



## Paid Internships

Americorps is a great way to pay off your student loans while also working for a non-profit organization, they have some regional local food and agriculture programs.  
<http://www.americorps.org>

Incubator farmer programs will sometimes pay a small stipend for work (see land sec-tion).

Often working part time for a landscaping business is a good way to morph farming + financial solvency. Particularly if the land-scaping is ecological or even edible.

- Apprentice's Equipment Checklist:**
- sunhat
  - sunglasses
  - work gloves
  - water vessel
  - flashlight
  - pruning shears
  - sleeping bag
  - dop/medical kit
  - work boots
  - rain gear
  - wool sweater
  - thick work pants
  - tent
  - chocolate

## University based programs

Educational and Training Opportunities in Sustainable Agriculture—a comprehensive list and description of Universities and their small farm oriented/sustainable agriculture programs <http://www.nal.usda.gov/afsic/pubs/edtr/EDTR2006.shtml>

Farming for Credit Directory lists hands-on and classroom-based sustainable ag education opportunities side by side. It's organized first by region, then alphabetically by state and within states by institutional name.

[http://www.rodaleinstitute.org/ffc\\_directory](http://www.rodaleinstitute.org/ffc_directory)

## Mentorships

Finding an individual trusted mentor is an important step for any young farmers. An experienced farmer who lives close by will be able to easily answer climate, equipment, pest and liability questions that arise. The advice of a trusted agricultural ally is invaluable—as may well be his/her blowtorch! Older farmers are usually glad to pass on their wisdom and are mostly quite generous once they establish that you are worthy of their time.

### + **Maine Organic Farmers and Gardners Association (MOFGA)**

Journeyper-son Program was created to fill the continuing education gap between apprentice and independent farmer, and to provide the resources and opportunities for prospective new farmers who have completed an apprenticeship to further develop the skills they need to farm independently and successfully.

<http://www.mofga.org/Programs/Journeypersons/tabid/228/Default.aspx>

+ **Land Stewardship Project-** Farm Beginnings is a farmer-led educational training and support program designed to help people who want to evaluate and plan their farm enterprise.

<http://www.landstewardshipproject.org>

## Curriculum and Programs for Teaching Interns/ Teaching Oneself

+ **Farm Internship Handbook** is designed to be used by individual farmers during the course of the work-week. Ideally, a farmer will use the In-Field curriculum when he or she is demonstrating a new task to interns. [http://www.attra.org/intern\\_handbook/](http://www.attra.org/intern_handbook/)

+ **UC Santa Cruz** has a freely downloadable curriculum that it uses to teach its Ecological Horticulture Class. Why not print it off and go through the work pages? That program covers plant propagation, row covers, green manures, orchard management, CSA planning... <http://casfs.ucsc.edu/education/instruction/esa/index.html>

+ **Beginning Farming 101** - Online Farm Planning Course with opportunities to evaluate another farmer's marketing plan or analyze a particular property to determine appropriate agricultural uses, access to live on-line seminars on topics like marketing or regulations and "meet" other new farmers and share ideas, plans and helpful resources with each other. Cost for the course is \$200. <http://beginningfarmers.cce.cornell.edu/>

### III. LAND

Financial Security is a major concern for many parents who hear that their child is interested to enter a career in agriculture, and it is often the main concern of potential young farmers who come from a farming background and have seen their parents suffer financial hardship. If you are a young farmer who someday wishes to feed your own children, and also pay their medi-cal bills-- it is critical to think long and hard about land tenure options

.A wonderful book I'd like to mention here is *How to start your small Farm* by Lynn Miller, editor of *Small Farm Journal* and folk hero of the horse-farming set. He cautions young and new farmers not to rush into acquiring land, if that also means acquiring debt. The problem with the debt is that its interest is often more than can be paid within the production values of sustainable agriculture, or at the pace of production most suitable for human happiness. Wendell Berry calls this the grating of economics and agronomics. At the outset, then, its often best to 'borrow' land, to steward the land of some holiday home owners, to gently lease some pastures from an extensive land-owner, "beg borrow or steal" if you have to, or do it as a sideline. "You can Farm!" by Joel Salatin lays out the groundwork for business planning, and business growth forecasting that will set you on the path to solid fiscal footing.

One of the biggest barriers to starting a farm is obtaining an actual piece of land: land prices are on the rise, farms are consolidating into larger sites of monoculture and U.S. farmers over age 55 control more than half the farmland. To further bitter the soup hedgefunders and speculators have begun investing in silos and other mega farm infrastructures since they think food prices will continue to rise and they'd like a piece of the pie-- these investments don't usually directly affect the price paid for agricultural land by young and beginning farmers, but these speculative forces (particularly associated with agro-fuels such as corn-based ethanol) do push up the cost of ag land per acre. As a beginning farmer it may seem near impossible to get your hands into soil you can call your own but do not despair, the land is there-- its just a matter of the 'step by step' progression towards getting tenured access to it. Charm, persistence, and a 'Jedi-force' or "fairy steam" are useful tactics.



One of the ways to find the land is to link up with your state's FARMLINK program. These offices facilitate the transition of land between generations of farmers and ranchers, keeping track of people who have land and are ready to pass it down to new farmers who don't have land. They also provide a degree of mentorship, business planning and banking advice. See next page for state listings of Farm Link programs.

**Farm On Program** is a service to help preserve the family farm business by matching beginning farmers who do not own land, with retiring farmers who do not have heirs to continue the family farm business: <http://www.extension.iastate.edu/bfc/programs.html>

**Incubator farms** usually support new farmers by offering access to land, equipment, infrastructure, and mentorships until farmers feel confident that they have enough experience to get along on their own tow feet and have the means to acquire their own land. Check out a great example at: Carolina Farm Stewards Incubator Project: <http://www.carolinafarmstewards.org/projects.shtml>



## Barn and Land Preservation

+ Tax Credits for barn preservation: [www.nps.gov/history/hps/tps/tax/](http://www.nps.gov/history/hps/tps/tax/). If your barn is older than 1936 you could be eligible for an income tax break equivalent to 20% of the project cost. Of course this privileges the privileged. But its a start, and a great incentive to property owners who might otherwise destroy their glorious barns. Young Farmers could be living in these barns folks!

+ Historic Barns: Working Assets for Sustainable Farms, this publication describes how older and historic barns can provide practical benefits to one of the most exciting and fastest-growing segments of the rural economy – sustainable agriculture. Using several case studies, the publication explains how historic barns can meet important functional, economic and marketing needs of sustainable producers. <http://www.preservationnation.org/issues/rural-heritage/resources-rural-heritage.html>

+ Farmland Information Center- a clearinghouse for information about farmland protection and stewardship. The website has fact sheets covering, Transfer of Development Rights (TDR), Purchase of Agricultural Conservation Easements (PACE), and more...It also has a very helpful Farmland Protection Toolbox. You can browse for resources by state! <http://www.farmlandinfo.org>



# FARM LINK

## Programs by State

(from Farm Transition website  
<http://www.farmtransition.org/>)

### + Arkansas Farm Link

Arkansas Development Finance Authority  
P.O. Box 8023 Little Rock, AR 72203  
Office: 501.682.5998  
Contact: Joyce HutchinsonE-mail: [jhutchinson@adfa.state.ar.us](mailto:jhutchinson@adfa.state.ar.us)

### + California Farm Link

P.O. Box 2224  
Sebastopol, CA 95473  
Office: 707.829.1691  
Fax: 707.829.1693  
Contact: Steve Schwartz  
E-mail: [info@californiafarmlink.org](mailto:info@californiafarmlink.org)

### + Iowa Farm On - Beginning Farmer Center

Iowa State University Extension  
10861 Douglas Avenue,  
Urbandale, IA 50322  
Office: 515.727.0656 Toll-free: 877.BFC.1999  
Fax: 515.252.7829  
Contact: John BakerE-mail: [jrbaker@ia-state.edu](mailto:jrbaker@ia-state.edu)

### + Maine Farm Link

P.O. Box 1597  
Bucksport, ME 04416  
Office: 207.469.6465  
Fax: 207.469.6470  
Contact: Esther La-Cognata,  
Coordinator  
E-mail: [esie@maine-farmlink.org](mailto:esie@maine-farmlink.org)

### + Maryland Eastern Shore Land Conservancy

P.O. Box 169  
Queenstown, MD 21658  
Office: 410.827.9756

### + Michigan FarmLink

Michigan Farm Bureau  
7373 W Saginaw Hwy.  
Lansing, MI 48917  
Office: 517.323.7000  
Toll-free: 888.805.4864  
Fax: 517.323.6604  
Contact: Matthew Smego  
E-mail: [msmego@mail.michfb.com](mailto:msmego@mail.michfb.com)

### + Minnesota Land Stewardship Project

Farm Beginnings  
P.O. Box 130 Lewiston, MN 55952  
Office: 507.523.3366  
Contact: Karen Stettler

E-mail: [stettler@land-stewardshipproject.org](mailto:stettler@land-stewardshipproject.org)

+ Montana Farm Link  
Alternative Energy Re-sources Organization  
432 NW Last Chance Gulch  
Helena, MT 59601  
Office: 406.443.7272  
Fax: 406.442.9120  
Contact: Jonda Crosby,  
Sustainable Ag Program Manager  
E-mail: [aero@aeromt.org](mailto:aero@aeromt.org)

+ Nebraska Land Link  
Center for Rural Affairs  
45 Main St. PO Box 136  
Lyons, NE 68038  
Office: 402.687.2100 Fax: 402.687.2200  
Contact: Michael Holton  
E-mail: [info@cfra.org](mailto:info@cfra.org)

### + The Beginning Farmer Program

Nebraska Department of Agriculture  
P.O. Box 94947 Lincoln, NE 68509-4947  
Office: 402.471.6890  
Toll-free: 800.446.4071  
Fax: 402.471.6876  
Contact: Marian Beethe,  
Program Administrator  
E-mail: [marianjb@agr.state.ne.us](mailto:marianjb@agr.state.ne.us)

### + New England Land Link

P.O. Box 608  
Belchertown, MA 01007  
Office: 413.323.4531  
Fax: 413.323.9594  
Contact: Eric Toens-meier  
E-mail: [landlink@small-farm.org](mailto:landlink@small-farm.org)

### + New Jersey State Ag Development Committee

PO Box 330 Trenton, NJ 08625-0330  
Office: 609.984.2504  
Fax: 609.633.2004 Contact: David Kimmel  
E-mail: [david.kimmel@ag.state.nj.us](mailto:david.kimmel@ag.state.nj.us)

### + New York Farm Link

c/o NY FarmNet  
415 Warren Hall Ithaca, NY 14853  
Office: 800.547.FARM  
E-mail: [info@farmlink.org](mailto:info@farmlink.org)

### + Pennsylvania Farm Link

2708 North Colebrook Road  
Manheim, PA 17545  
Office: 717.664.7077  
Fax: 717.664.7078  
Contact: Marion Bowlan  
E-mail: [pafarmlink@dejazzd.com](mailto:pafarmlink@dejazzd.com)

+ Center for Farm Transitions  
Pennsylvania Dept. of Agriculture  
2301 North Cameron Street  
Harrisburg, PA 17110-9408  
Toll-free: 877-475-2686  
Contact: D. Robert Davidson  
Email: [ddavidso@state.pa.us](mailto:ddavidso@state.pa.us)

### + Vermont Land Link Center for Sustainable Agriculture

Office: 802.656.0233 Fax: 802.656.8874  
Contact: Deb Heleba  
Virginia FarmLink Virginia

### + Department of Agriculture and Consumer Services

P.O. Box 1163  
Richmond, VA 23218  
Office: 804.786.3501  
Fax: 804.371.2945  
Contact: William P. Dickinson  
E-mail: [wdickinson@vdacs.state.va.us](mailto:wdickinson@vdacs.state.va.us)

### + Virginia Farm Bureau Federation

P.O. Box 27552  
Richmond, Virginia 23261-7552  
Office: 804.290.1017  
Fax: 804.290.1099  
Contact: Brock Herzberg  
E-mail: [brock.herzberg@vafb.com](mailto:brock.herzberg@vafb.com)  
<http://www.vafb.com>  
<http://www.save-farms.com>

### + Washington Farm Assistance

Puget Sound Farm Trust  
P.O. Box 47436 Seattle, WA 98146  
Office: 206.767.7334 Fax: 206.767.0111  
Contact: Melinda McBride  
E-mail: [mac@eskimo.com](mailto:mac@eskimo.com)

### + Washington Farm Link Cascade Harvest Coalition

4649 Sunnyside Avenue North,  
Room 123  
Seattle, WA 98103  
Office: 206.632.0606  
Fax: 206.632.1080  
Contact: Mary Emble-tonE-mail: [mary@oz.neth](mailto:mary@oz.neth)  
<http://wafarmlink.org/>, <http://www.cascadeharvest.org>

+ Wisconsin Farm Center  
Office: 800.942.2474 or 608.224.5049  
Fax: 608.224.5107  
Contact: Gwen Garvey  
E-mail: [Gwen.Garvey@datcp.state.wi.us](mailto:Gwen.Garvey@datcp.state.wi.us)

# IV. CAPITALIZATION OF SMALL DIVERSIFIED OPERATIONS:

## Business Planning & Accounting

Whether you want to get into farming because you love working outdoors or you want to make a positive difference in the current food system, basic accounting and business planning skills are important in reaching your farming goals. Unless you already have a large fortune, making your operation economically sustainable for yourself and any business partners or workers makes your business truly sustainable. Here are a few resources to help you develop a plan and fine-tune your financial skills.

+ Aubrey, Sarah. 2008. *Starting and Running Your Own Small Farm Business*. Storey Publishing, LLC.

This book includes small farm success stories, sources for financial assistance, marketing and selling ideas, and business plan forms and documents.

+ Butterfield, Jody, Sam Bingham, and Allan Savory. 2006. *Holistic Management Handbook: Healthy Land, Healthy Profits*. Island Press.

Based on the premise that healthy land leads to healthy profits, this guide includes detailed charts and figures and a chapter devoted to creating your financial plan.

+ Davis, Poppy. *Beginning Farmer and Rancher Resources: Basic Bookkeeping, Budgeting, Tax Recordkeeping*, other stuff. 1 Feb. 2008. <http://beginningfarmerrancher.wordpress.com/>

A simple website written by a certified public accountant with experience working with small farm enterprises.

+ Holistic Management International. *Improving Whole Farm Planning Through Better Decision-Making*. 2001. [http://www.holisticmanagement.org/n7/Info\\_07/in4\\_whole\\_farm\\_planning\\_07.html](http://www.holisticmanagement.org/n7/Info_07/in4_whole_farm_planning_07.html)

Funded by the Northeast Sustainable Agriculture & Research and Growing New Farmers, this collection of case studies was developed by instructors participating in the Savory Center's 2001 Northeast Holistic Management® Certified Educator Training Program.

+ Internal Revenue Service, U.S. Dept. of the Treasury. *Small Business/Self-Employed Virtual Small Business Tax Workshop*. <http://www.irs.gov/businesses/small/article/0,,id=97726,00.html>

A series of video workshops to help new and existing small business owners comprehend and fulfill their federal tax obligations. Available as downloads using Windows Media Player or a transcripts.

+ New England Small Farm Institute. 2004. *Exploring the Small Farm Dream: Is Starting an Agricultural Business Right for You?* <http://www.smallfarm.org/explorer/>

A decision-making tool to help people establish a clear vision, learn what it takes to start and manage a commercial agriculture business, and decide if this path is right for them.

+ Macher, Ron. 1999. *Making Your Small Farm Profitable: Apply 25 Guiding Principles, Develop New Crops & New Markets, Maximize Net Profits per Acre*. Storey Publishing, LLC.

This how-to guide examines 20 alternative farming operations and shows how to target niche markets while maintaining your farm's economic and biological health.

+ Salatin, Joel. 1998. *You Can Farm: The Entrepreneur's Guide to Start & Succeed in a Farming Enterprise*.

An entertaining read to inspire (or deter) you from farming. Depicting the realities of getting your operation to turn a profit, this book covers topics such as envisioning your business, value-added products, and useful insights on the lifestyle of a successful farmer.

+ Sustainable Agriculture Network. 2003. *Building a Sustainable Business: A Guide to Developing a Business Plan for Farms and Rural Businesses*. Minnesota Institute for Sustainable Agriculture. – online PDF available <http://www.sare.org/publications/business.htm>

Full of sample worksheets, actual examples, and direction for "alternative and sustainable agriculture entrepreneurs," this book will help you create a lender-ready business plan and develop a concrete strategy for success.

+ Zimmer, Gary F. 2000. *The Biological Farmer: A Complete Guide to the Sustainable & Profitable Biological System of Farming*. Acres U.S.A.

## Loans

Starting a farm is not cheap; it requires capital for equipment, inputs, and land. The federal government and states offer a variety of loan programs to help you start your enterprise:

### *State Loan Programs*

Through various state programs, new farmers may access a few types of loans that one can use to purchase farmland, equipment, livestock, and buildings.

- + *Aggie Bond Beginning Farmer Loans* – Through the state, private lenders can earn federally-exempt interest income when they make loans to qualified farmers. Lenders are able to provide loans at reduced interest rates because of the tax savings.

- + *Guarantee Loan Programs* - Private lenders receive up to 85% guarantee of principal and interest.

- + *Direct Loan Programs* - State legislatures allocate funds for direct loans, usually for specific programs within agriculture, and are provided by a state agency or authority.

- + *Loan Participation Programs* - In the case where farmers and ranchers have low equity, a state agency or authority buys part of the loan from a private lender.

- + The National Council of State Agricultural Finance Programs has more information on these types of loans and provides an easy-to-navigate directory of state loan programs: <http://www.stateagfinance.org>

### *Federal Loan Programs*

If you are unable to receive financing from commercial lenders, you may be eligible for a direct or guarantee loan through the USDA's Farm Service Agency. Congress appropriates funding to loans each year with a portion aimed at beginning farmers. Contact your local FSA office for assistance.

- + Farm Service Agency: Beginning Farmer Loan Program: <http://www.fsa.usda.gov/FSA/webapp?area=home&subject=fmlp&topic=bfl>

- + Farm Credit Services of America – Young and Beginning Program: <http://www.fcsamerica.com/3f2f8c63-2c99-415f-a24c-3-b1581d3262d.aspx>

## Other

You may find other loan sources in your community from unsuspecting sources - read the newspaper, talk to local leaders, check out the food co-op bulletin board. A couple other loan sources worth mentioning:

- + Local Producer Loan Program: Through the Local Producer Loan Program, Whole Foods Market makes \$10 million available annually for low-interest loans to small, local producers. Eligible products include agricultural crops, value-added food products, and other all-natural grocery items. Applications are accepted on a rolling basis. <http://www.wholefoodsmarket.com/products/locallygrown/lplp/index.html>

- + Customers: You may find over time, you have a devoted customer base that wants to see you succeed. While not a realistic loan source to help you get your operation going, you might have a customer willing to give you a loan to help you expand your business or take on a new project. For example, many CSA farmers are able to obtain non-collateral loans with low or no interest rates to buy land or inputs.

## Grants

Many trade associations, foundations, and other non-profit organizations involved with agriculture, rural development, and environmental conservation offer grants to farmers and ranchers. A great one-stop-shop for current grant opportunities is at NSAIS' ATTRA web page for funding opportunities: <http://attra.ncat.org/funding/>

This site is easy to search and current. Many grant programs are research-oriented, and if you build relationships with agricultural professionals in academia who have a research interest related to your farming operation, you have a great chance to capitalize on some of these funding opportunities. This list is by no means complete, but it gives an idea of what organizations exist to fund farm-related projects:

- + American Farmland Trust: <http://www.aftresearch.org/grant/>
- + American Sheep and Goat Center: <http://www.sheepandgoatsusa.org/2008%20Grant%20Ann..htm>
- + CROPP's Farmers Advocating for Organics: <http://www.organicvalley.coop/our-story/farmer-fund/farmers-advocating-for-organics-fund/>
- + David and Lucille Packard Foundation: <http://www.packard.org/categoryDetails.aspx?RootCatID=4&CategoryID=252>
- + Leopold Center for Sustainable Agriculture: <http://www.leopold.iastate.edu/research/rfp/2008.html>
- + National Gardening Association: <http://assoc.garden.org/grants/>
- + Organic Farming Research Foundation: <http://ofrf.org/index.html>
- + Sustainable Agriculture Research and Education: <http://www.sare.org/grants/>
- + U.S Environmental Protection Agency

## STAPLES FOR YOUR BOOKSHELF:

- \* Eliot Coleman's *Fertile Dozen*
- \* *Make Friends With Your Land* - Leonard Wickenden, 1948
- \* *Soil and Sense* - Michael Graham, 1941
- \* *The Stuff Man's Made Of* - Jorian Jenks, 1959
- \* *Farmers of Forty Centuries* - FH King, 1911
- \* *The Soil and Health* - Albert Howard, 1947
- \* *Agriculture: A New Approach* - P H Hainsworth, 1947
- \* *Plowman's Folly* - Edward H Faulkner, 1945
- \* *The Farming Ladder* - George Henderson, 1944
- \* *Compost* - Alwyn Seifert, 1962
- \* *Nutrition and the Soil* - Lionel Picton, 1949
- \* *The Soil and the Microbe* - Selman Waksman and Robert Starkey, 1931
- \* *The Pesticide Conspiracy* - Robert Van Den Bosch, 1978

## V. LET'S GET STARTED:

One of the first questions you need to answer is whether you want to grow crops, raise livestock, or both. Is there something you already enjoy growing or eating? Do you have a targeted market with a specific demand? What are other growers in your market selling? These questions should be answered as you map out your business plan. Very likely, your personality and work style will lead you to what you choose to grow or raise, and eventually, where and how you plan to sell your produce. Some farmers find raising livestock to be more engaging than growing crops. Others enjoy being able to take time off from chores, which taking care of animals makes difficult.

### What to grow

Most growers of field crops tend to raise annuals, as opposed to perennials, because they do not have to make such a long-term investment. Growing grapes and fruit trees requires a bigger commitment than lettuce and cucumbers. Keep this in mind when you derive your crop plan. Demand can change over time, but higher-value crops can pay off.

It is helpful to contact your local or state extension office to determine what crops are best suited to your area. The USDA CSREES maintains a directory of Extension Offices here: [http://www.csrees.usda.gov/qlinks/partners/state\\_partners.html](http://www.csrees.usda.gov/qlinks/partners/state_partners.html)

Crop diversification is one proven way for successful small farms.

- + SARE provides a useful introductory publication, *Diversifying Cropping Systems*: <http://www.sare.org/publications/diversify.htm>

- + List of Alternative Crops for Small Farm Diversification: <http://www.nal.usda.gov/afsic/pubs/altlist.shtml#resources>

- + Questions to ask about alternative crops: <http://pnw-ag.wsu.edu/AgHorizons/notes/sr3no1.html>

- + Alternative Crop Suitability Maps: <http://www.sws.uiuc.edu/data/altcrops/>

### Buying Seeds

Gardeners and farmers have many seed vendor choices to choose from. A good starting place is the NCAT's Organic Seed Suppliers Search, by Katherine L. Adam and Nancy Matheson: [http://attra.ncat.org/new\\_pubs/attra-pub/altseed\\_search](http://attra.ncat.org/new_pubs/attra-pub/altseed_search).

Note: If you choose to certify your operation as organic, you must use organic, non-GMO, untreated seed when available. If it is not commercially available as organic, you must be able to prove so. Financial cost is not a factor in its availability.

Seed exchanges are wonderful venues to obtain rare and diversity-rich varieties. They are any place where gardeners and farmers can request and share seeds that they have saved. Many exist online, such as:

- + Seed Savers Exchange: <http://www.seedsavers.org>

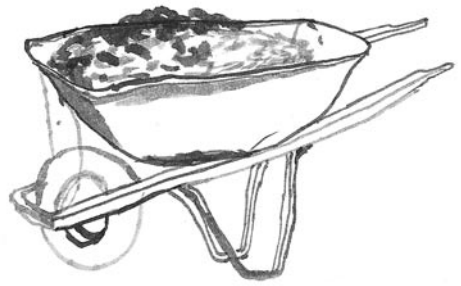
- + Southern Exposure Seed Exchange: <http://www.southernexposure.com/index.html>

You can look for seed exchanges at some agricultural conferences and festivals as well. <http://www.mass.gov/agriculture/suppliers> Suppliers of Seed for Certified Organic Production Database

# Sustainable Pest Management

In managing insects, weeds, and disease, sustainable farming relies on cultural practices and management decisions that forgo chemicals and activities harmful to the environment. Biological and economic success are possible through more labor and different inputs and equipment compared to “conventional” agriculture. To learn more about integrated pest management, beneficial insects, weed management strategies, and beating crop diseases, see the resources below as a starting point.

- + Altieri, Miguel. 2005. *Manage Insects on Your Farm: A Guide to Ecological Strategies*. Sustainable Agriculture Network.
- + Bowman, Greg. 1997. *Steel in the Field: A Farmer's Guide to Weed Management Tools*. Sustainable Agriculture Network.
- + Ellis, Barbara W., and Fern Marshall Bradley, editors. 1996. *The Organic Gardener's Handbook of Natural Insect and Disease Control: A Complete Problem-Solving Guide to Keeping Your Garden and Yard Healthy without Chemicals*. Rodale Books.
- + Flint, Mary Louise, and Steve H. Driestadt. 1999. *Natural Enemies Handbook*. University of California Press.
- + Flint, Mary Louise. 1999. *Pests of the Garden and Small Farms: A Grower's Guide to Using Less Pesticide*. University of California Press.
- + Helyer, Neil, Kevin Brown, and Nigel D. Cattlin. 2003. *A Color Handbook of Biological Control in Plant Protection*. Timber Press, Inc.
- + McCaman, Jay L. 1994. *Weeds and Why They Grow*.
- + Jay L. McCaman. Starcher, Allison Mia. 1995. *Good Bugs for Your Garden*. Algonquin Books.
- + SARE. *A Whole-Farm Approach to Managing Pests*. <http://www.sare.org/publications/farmpest/farmpest.pdf>
- + Walters, Charles. 1999. *Weeds: Control without Poisons*. Acres U.S.A.
- + Weinzierl, Rick, and Tess Hearn. 1991. *Alternatives in Insect Management: Biological and Biorational Approaches*. North Central Regional Extension Publication 401. Cooperative Extension Service, Agricultural Experiment Station, University of Illinois. <http://www.ag.uiuc.edu/%7Evista/abstracts/aaltinsec.html>
- + American Farmland Trust. Center for Agriculture in the Environment. <http://www.farmland.org/resources/cae/default.asp>
- + Association of Applied IPM Ecologists <http://www.aaie.net/>
- + ATTRA Publications on Sustainable Pest Management - a series of publications on how to deal with common weed, insect and disease problems. <http://attra.ncat.org/pest.html>
- + Department of Crop and Soil Sciences, Cornell University. The Organic Weed Management Website. <http://www.css.cornell.edu/weedeco/WeedDatabase/index2.html>
- + Department of Entomology, North Carolina State University. Biological Control Information Center. <http://cipm.ncsu.edu/ent/biocontrol/>
- + Krasta, Thorsten. Plant Pathology Internet Guide Book. <http://www.pk.uni-bonn.de/ppigb/ppigb.htm>
- + Rodale Institute. The weeds page: Integrated weed management. <http://www.new-farm.org/depts/weeds/index.shtml>
- + Organic Farming Research Foundation. Weed Management Project Reports [http://offr.org/funded/weed\\_mgmt.html](http://offr.org/funded/weed_mgmt.html)



## Equipment

- + Kubik, Rick. 2005. *How to Use Implements on Your Small-Scale Farm*. Motorbooks Workshop.
- + Quick, Graeme R. 2006. *The Compact Tractor Bible*. Voyageur Press.

## Buying & Leasing

If you are looking to buy farm equipment, such as a tractor, you can buy it new at a dealership or use your local newspaper's classifieds to look for or post a wanted ad. You can also find postings at your farm supply store's community bulletin board if they have one.

A few classifieds websites for farm equipment exist:

TractorHouse.com - used and new farm equipment for sale

AgriSeek <http://www.agriseek.com/buy/e/Equipment/>

U.S. Farmer <http://www.usfarmer.com/>

IRON Classifieds <http://www.ironclassifieds.com>

Hall, Mike, ed. 2007. *The Official Tractor Blue Book 2008*. Price Digests.

## Making

Knowledge of basic electrical skills, plumbing, carpentry, and welding can save you money in building your operation's infrastructure and equipment arsenal. Many community colleges offer affordable classes in these vocational skills. You can also find how-to books on these topics as well as homesteading and farm books with specific project plans and directions. Below is a small sampling of how-to books available:

+ BuildEazy- wood working plans for pretty much anything you might want to build [http://www.bildeazy.com/fp\\_start.html](http://www.bildeazy.com/fp_start.html)

+ Braren, Ken, and Roger Griffith. 1980. *HomeMade: 101 Easy-to-Make Things for Your Garden, Home, or Farm*. Storey Publishing, LLC.

+ Ching, Francis D. K. 2008. *Building Construction Illustrated*. Wiley.

+ Cobleigh, Rolfe. 1996. *Handy Farm Devices: And How to Make Them*. The Lyons Press.

+ Damerow, Gail. 1999. *Building Chicken Coops: Storey Country Wisdom Bulletin A-224*. Storey Publishing.

+ Ekarius, Carol. 2004. *How to Build Animal Housing: 60 Plans for Coops, Hutches, Barns, Sheds, Pens, Nestboxes, Feeders, Stanchions, and Much More*. Storey Publishing.

+ Freeman, Mark. 1997. *Building Your Own Greenhouse*. Stackpole Books.

+ Haun, Larry. 1999. *Homebuilding Basics Carpentry*. 1999.

+ Marshall, Roger. 2006. *How to Build Your Own Greenhouse*. Storey Publishing.

+ Pangman, Judy. 2006. *Chicken Coops: 45 Building Plans for Housing Your Flock*. Storey Publishing.

## Maintenance and Repair

Your vehicle or equipment's manual is the best guide in terms of keeping it serviced and repaired. You can often call the maker for assistance as well. Farm equipment dealerships employ mechanics or service technicians who will help as well.

+ Florida Department of Agriculture and Conservation and the Florida Department of Environmental Protection. 2003. *Best Management Practices for Agrichemical Handling and Farm Equipment Maintenance*.

[http://www.flaes.org/pdf/BMP\\_Ag-richemical\\_Handling.pdf](http://www.flaes.org/pdf/BMP_Ag-richemical_Handling.pdf)

+ Harrison, Dalton S. November 1992. Farm Tractor and Equipment Maintenance. University of Florida, Florida Cooperative Extension Service.

<http://p2pays.org/ref%5C08/07669.pdf>

+ Kubik, Rick. 2006. *Farm Safety Handbook*. Voyageur Press.

+ Kubik, Rick. 2005. *How to Keep Your Tractor Running*. MBI.

+ US EPA. Vehicle and Equipment Maintenance and Repair. Provides pointers and links to additional information on proper disposal of used oil, spent fluids, batteries and machine shop wastes.

<http://www.epa.gov/oecaagt/tveh.html>

+ Welsch, Roger. 2005. *From Tinkering to Torquing: A Beginner's Guide to Tractors and Tools*. MBI.

## Soil Fertility

Abundant crops and livestock rely on fertile soil. Ample nutrients and minerals, organic matter, microorganisms, sufficient moisture, and good pH are the basis of healthy soil which will ultimately feed you and your consumers. Below are a few resources on how to build hearty soil:

+ ATTRA NSAIS. Soils & Compost. 28 Dec. 2007. <http://attra.ntcat.org/soils.html>

+ Crop Rotation Planning Procedure: [www.neon.cornell.edu/croprotation/eChapter5.pdf](http://www.neon.cornell.edu/croprotation/eChapter5.pdf)

Books

+ Donahue, Roy L., Raymond W. Miller, and John C. Shickluna. 1983. *Soils: An Introduction to Soils and Plant Growth*. 5th ed. Prentice Hall.

+ Lal, Rattan, ed. 1999. *Soil Quality and Soil Erosion*.

+ Manure Application Planning workbook <http://www.ag.ndsu.edu/pubs/ansci/waste/ae1187w.htm>

+ Organic Farming Research Foundation. Fertility Management Progress Reports. 2008. [http://ofrf.org/funded/fertility\\_mgmt.html](http://ofrf.org/funded/fertility_mgmt.html)

+ Soil and Water Conservation Society. <http://www.swcs.org/index.cfm>





## Irrigation

- + Hoffman, Glenn J., Robert G. Evans, Marvin Eli Jensen, Derrel L Martin, Ronald L. Elliott. 2007. *Design and Operation of Farm Irrigation Systems*.
- + Keesan, Larry, and Cindy Code. 1995. *The Complete Irrigation Workbook: Design, Installation, Maintenance and Water Management*.
- + Southorn, Neil. 1997. *Farm Irrigation: Planning and Management*. Butterworth-Heinemann. GIE Media, Inc.
- + Styles, Stuart W., and Charles M. Burt. 1999. *Drip and Micro Irrigation for Trees, Vines, and Row Crops*. Irrigation Training and Research Center.
- + Yeomans, P.A. 2008. 4th Edition. *Water for Every Farm: Yeomans Keyline Plan Createspace*.

## Electrical Wiring

- + Editors of Creative Publishing. 2005. *The Black and Decker Complete Guide to Home Wiring*. Creative Publishing International.
  - + Richter, Herbert P., and F. P. Hartwell. 2005. *Practical Electrical Wiring: Residential, Farm, Commercial and Industrial*. Park Publishing, Inc.
  - + Richter, H. P., W. C. Schwan, and F. P. Hartwell. *Wiring Simplified*. Park Publishing, Inc.
  - + Shapiro, M. 2007. *Dr. Watts Pocket Electrical Guide 2008*. W Marketing.
- ### Welding
- + Finch, Richard. 2005. *The Farm Welding Handbook*. MBI.
  - + Galvery Jr., William L., and Frank B. Marlow. 2007. *Welding Essentials*. Industrial

## Livestock

- + <http://attra.ncat.org/livestock.html>
- + Storey Books [http://www.storey.com/category\\_listing.php?cat=Animals](http://www.storey.com/category_listing.php?cat=Animals)
- + Holistic Management®, <http://www.holisticmanagement.org/index.html>
- + Allan Savory (dig up this book & conference material at Adam's)
- + Carol Ekarius. *Small-Scale Livestock Farming: A Grass-Based Approach for Healthy, Sustainability, and Profit*.
- + Nation, Allan. *Grass-Fed to Finish: A Production Guide to Gourmet Grass-Finished Beef*.

## Staying Current

Being up-to-date with the latest agricultural news can be crucial to a successful farm operation. Periodical, journals, and newsletters, on paper or the web, are accessible resources for current information.

### **Acres U.S.A:**

<http://www.acresusa.com/magazines/maga-zine.htm>

"North America's oldest, largest magazine covering commercial-scale organic and sustainable farming ..." offers much literature and media on sustainable agriculture, as well as educational events."

### **American Vegetable Grower:**

<http://www.americanvegetablegrower.com>

### **ATTRA Weekly Harvest Newsletter (email) & ATTRA news:**

<http://attra.ncat.org/newsletter/archives.html>

### **BEEF Magazine:**

<http://beefmagazine.com>

Cattle/cow herding news and resource

### **Brownfield Network: Ag News for America:**

<http://www.brownfieldnetwork.com/>

View market and commodity reports, keep up to date on farm and food policy, find out about the latest agricultural innovations, and much more.

### **Elite Farmer: Farming for Tomorrow ...Today:**

<http://www.elitefarmer.com>

"Inside you'll find links and articles about crops, livestock, breeders societies and associations, colleges, agricultural machinery manufacturers, auction markets, newspapers – anything related to farming on the web."

### **Good Fruit Grower Magazine:**

<http://www.goodfruite.com/linksbot.html>

### **Growing: Fruit, Nut and Vegetable Production**

<http://www.growingmagazine.com>

### **Home Grown Poultry: Chickens, Waterfowl & Exotic Poultry-**

<http://www.homegrownpoultry.com>

A "how to" magazine that is all about raising, showing and marketing chickens, waterfowl, and exotic poultry

### **Practical Poultry:**

<http://www.practicalpoultry.co.uk>

A magazine dedicated to keepers of chickens, waterfowl and exotic poultry

### **Sheep! The Voice of the Independent Flockmaster:**

<http://www.sheepmaga-zine.com/>

### **Small Farmer's Journal:**

"More like a community odyssey than a periodical, Small Farmer's Journal is packed to over-full with more information than you might find in three or four conventional magazines ...a vibrant and excit-ing platform for engaging far-flung ideas about anything pertinent to the small family farm experience..."

### **The Goat Magazine:**

<http://www.goatmagazine.com>

"A leader in all-breed goat periodicals"

## VI. MARKETING THE FOOD:

### Marketing

Not only need one be fit to endure the physical labor of farming-- the work beyond the land is a whole different mind game. As someone who has chosen to opt out of a mainstream consumerist lifestyle it may seem counterintuitive to have to strategically translate the fruits of your labor into an actual living, but you must have some business savvy to get by (unless you are completely self-sufficient). Becoming certified organic (an often costly procedure) can open up more stringent markets. Community Supported Agriculture (CSA) and farmer's markets are more direct marketing methods with the closest relationship between producer and consumer but are most time intensive.



+ **Organic Farmers Agency for Relationship Marketing (OFARM)**- as a member you can: Share reliable price information with other OFARM producer groups, develop reliable inventory information, remain current on markets and market trends, strengthen your position in the market by eliminating one-on-one negotiations with buyers, develop and monitor producer-friendly contracts, develop and monitor a list of sound, creditworthy buyers for OFARM member groups and enhance opportunities to add new crops and agronomic practices to farm rotations.

<http://www.ofarm.org>

+ **Center for Agroecology and Sustainable Food Systems (CASFS)**: Teaching Direct Marketing and Small Farm Viability: Resources for Instructors- organized into six units, three focusing on marketing and three covering other topics related to making a small farm economically viable. Included are lessons and resources for running a CSA project, selling at farmers' markets, forming col-laborative marketing groups and grower cooperatives, and selling to restaurants. Also covered are strategies to improve small farm planning, including enterprise visioning and market assessment; creating a business plan, including marketing and crop plans; and managing cash flow.

<http://casfs.ucsc.edu/education/instruction/tm/content.html>

+ **Midwest Organic and Sustainable Education Service (MOSES)**: "Brokers, Buyers, Cooperatives and Processors" a list of companies that buy organic goods in order to process and/or resell the goods

<http://www.mosesorganic.org/umord/brokerscoops.htm>

## Certifications

Organic Trade Association: How to go Organic- a collection of existing resources for anyone exploring how to transition to organic <http://www.how-togoorganic.com>

+ **Organic Ag Info-** The site provides current, accurate, scientifically-based or practically validated information about organic agriculture. Contains information on production, economic data, research results, farmer anecdotes, certification information, transition strategies, as well as many other subjects related to organic agriculture. <http://www.organicaginfo.org>

+ **Organic Certifiers Database, New Farm-** search, browse and compare certifiers. <http://www.newfarm.org/ocdbt/>



## Pricing

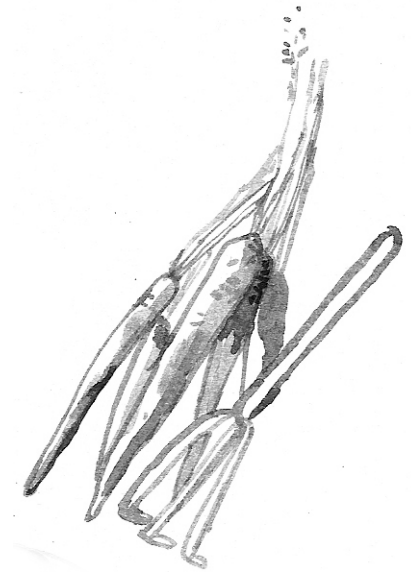
To help you stay competitive, here are a couple resources showing current market prices for food and agricultural products.

+ **USDA, National Agricultural Statistics Service.** Economics, Statistics, and Marketing Information System. Agricultural Prices. updated monthly. <http://usda.mannlib.cornell.edu/MannUsda/viewDocumentInfo.do?documentID=1002>

+ **Rodale Institute. Organic Price Report.** 8 Jul. 2008. <http://www.rodaleinstitute.org/Organic-Price-Report>

+ **University of California Agricultural Issues Center.** <http://aic.ucdavis.edu/research1/organic.html>

\*Check your Cooperative Extension for price information for your region or state. Cooperative Extension System offices <http://www.csrees.usda.gov/Extension/>



## Community Supported Agriculture (CSA)

A great way to eliminate the uncertainty of selling your harvest, insure yourself against risks of the season and have direct contact with consumers! Typically, members or “share-holders” of the farm or garden pledge in advance to cover anticipated costs of the farm operation and farmer’s salary. In return, they receive shares in the farm’s bounty, usually in weekly shares, throughout the growing sea-son, as well as satisfaction gained from reconnecting to the land and par-ticipating directly in food production.

**CSA Resources** for Farmers (USDA)- <http://www.nal.usda.gov/afsic/pubs/csa/csafarmer.shtml>

**Locate a farm near you:** The Robyn Van En Center provides a national resource center about Community Supported Agriculture (CSA) for people across the nation and around the world.<http://www.wilson.edu/wilson/asp/content.asp?id=804>

**LocalHarvest** helps consumers find CSAs, farm markets and product information for small farms nationwide (USA) <http://www.localharvest.org>

**Eat Well Guide** Find wholesome, fresh, sustainable food in the US and Canada; search by zipcode, <http://www.eatwell-guide.org/i.php?id=Home>

**Farmers markets-** USDA Farmers Market Directory, <http://apps.ams.usda.gov/Farmer-sMarkets/>

## VII. COMMUNITY

"The community I desire is not grudging; it is exuberant, joyful, grounded in affection, pleasure, and mutual aid. Such a community arises not from duty or money but from the free interchange of people who share a place, share work and food, sorrows and hope. Taking part in the common life means dwelling in a web of relationships, the many threads tugging at you while also holding you upright."

- Scott Russell Sanders  
'The Common Life' in Writing from the Center

Incorporating yourself into your community and being neighborly are important factors in successful farming. Especially if you are moving to a rural community for the first time, your neighbors can help you find local resources, get you acquainted with the history of your land and weather conditions, or assist you in times of need if you are willing to reach out to them, too. You might find you need to rely on your neighbor to feed your animals while you are gone, to lend you their front end loader, or help you rebuild your barn. Regardless as to whether they use harmful pesticides or don't believe in composting, connecting with other farmers and ranchers is also key to finding camaraderie in an ever-rarer vocation, as well as being accepted in the greater community.

### **Ways to get involved in your community:**

- Enter the county fair and volunteer time there.
- Have your children join 4-H. <http://www.4-h.org/>
- Help at events such as your fire department's barbeque or the local horse show.
- Be personable and remembered at the farm supply store.
- Patronize businesses in the community.
- Join the local food co-op and attend membership meetings.

### **Other Avenues**

+ **Rooted In Community:** <http://www.rootedincommunity.org/>

+ **Community & Countryside** is a two-day educational workshop during which 30 community leaders learn from top experts about the best tools for community revitalization and historic preservation, and how to solve land-use management and community design challenges currently facing small towns and rural communities. more info at: <http://www.preservationnation.org/resources/training/community-countryside/>

## VIII. URBAN AGRICULTURE



Cities cover only 2% of the Earth's surface, but consume 75% of its resources (Journey to Forever). This is where the huge disconnect between people and their food began. The average inner city teenager won't be able to tell you where their food came from beyond the shelves of a supermarket. But, there is no need to feel discouraged if you are an urbanite: not only is it getting easier to seek out local food, you can also take matters into your own hands, get the best of both worlds, and grow food yourself. Whether it's a victory garden in a small patch of land, a roof garden or potted plants on your windowsill, there are innovative ways to make urban agriculture surprisingly productive and satisfying. Check these:

+ **Ecology Action**- aware of intensifying world challenges and the basic need of people to feed themselves, we have developed a small-scale agricultural system — GROW BIOINTENSIVE®- Sustainable Mini-Farming — that nurtures soil, produces high yields, conserves resources and can be used successfully by almost everyone. Our goal is to help this system be known and used locally — on a worldwide scale. <http://www.growbiointensive.org/index.html>

+ *How To Grow More Vegetables\*, than you ever thought possible on less land than you can imagine* (Ten Speed Press) by John Jeavons.

+ **Urban Permaculture Guild** facilitates artistic and ecologically-oriented place-making and educational projects that honor the interconnection of human communities and the natural world. <http://www.urbanpermacultureguild.org/index.htm>

+ **City Farmer's Urban Agriculture Notes**, by City Farmer, Canada's Office of Urban Agriculture -- large and excellent site, at the centre of the burgeoning urban farming movement -- thorough coverage of all aspects of this fascinating and hopeful subject, from green roofs in Berlin and Chicago, through school gardens, organics, compost, vermiculture, composting toilets, and edible parks to the millions of destitute people fighting hunger and pollution in Third World shantytowns, and much more.

+ **The Food Project**: our mission is to grow a thoughtful and productive community of youth and adults from diverse backgrounds who work together to build a sustainable food system. Has amazing resources for starting up an urban farm and community programming that can go along with it. <http://www.thefoodproject.org/>

# \* Bio-Bling \*

## Living it up Sustainably

Farming is way more than a job, it is a lifestyle. You are essentially shaping the growth of an ecosystem that never sleeps. As key manipulator of this ecosystem, it is your responsibility to make sure your "non-farm" actions are just as holistically planned as your fields. There are many choices you can make to limit pressure on the land, for the good of your farm and for the broader environmental picture. They can be as simple as the old brick in the toilet trick to minimize water usage, to harvesting alternative energy through rooftop solar panels or a windmill. A lot of these projects are fun to set up yourself and addicting...once you get your hands on some "bio-bling" you just can't stop! There are always new experiments in conservation to test out. Here are some ideas:

Build it Solar: "The Renewable Energy Site for Do-It-Yourselfers." This site has over 500 projects from bubble wrap window insulation to constructing your own windmill

<http://www.builditsolar.com>

Experiments in Sustainable Urban Living- descriptions of easily implemented and cheap sustainable projects (including a compost powered solar water heater)

<http://ersson.sustainabilitylane.com/>





## Permaculture:

+ *ATTRA's Introduction to Permaculture: Concepts and Resources*- This publication offers definitions and descriptions of permaculture and its central principles. It offers listings of resources and publications on permaculture in the United States, Australia, and worldwide.

<http://attra.ncat.org/attra-pub/perma.html#us>

+ *Housebuilder Sustainability Toolkit*- provides clear guidance for housebuilders seeking to address a wide range of sustainability issues. The toolkit, compiled by Upstream (a strategic sustainability consultancy specialising in the built environment) tackles a variety of concerns including climate change, community involvement, the sustainable use of materials, and waste.

<http://www.wwf.org.uk/sustainablehomes/toolkit.asp>

+ Holmgren, David. *Permaculture: Principles and Pathways Beyond Sustainability*. 2002

+ Mollison, Bill, *Permaculture: A Designers Manual*. 1997

+ Chiras, Dan, Wann, Dave. *Superbia: 31 Ways to Create Sustainable Neighborhoods*. 2004.

## Yurts:

(resource list from <http://www.yurtinfo.org/> a hub on all that is yurt)

+ *The Complete Yurt Handbook* by Paul King, Ecologic Books, 2001.

Yurt builder Paul King provides detailed instructions on how to make both Mongolian and Turkic yurts. Online resource available at <http://www.woodlandyurts.co.uk>

+ *Mongolian Cloud Houses: How to Make a Yurt and Live Comfortably* by Dan Kuehn, Shelter Publications, 2006.

A re-issue and update of Dan Kuehn's 1980 plans for making a 13-foot diameter Mongolian yurt from bamboo or willow with a canvas cover.

+ *The Real Mongol Ger Book* by Froit

Construction details for an authentic Mongol ger. A beautiful handmade book

with samples of wood, felt and canvas included.

+ *How to Build a Yurt* by Steve Place  
Factsheet on building a Turkic style yurt by Welsh yurt craftsman Steve Place of Handmade Hardwood Yurts.

+ *Yurt/Ger Notes* In 2005 Rene K. Muller built his own traditional ger and these are his notes, along with a Yurt Calculator for the dimensions of yurt components. An amazing resource!

+ *The Construction of a Yurt* by Ellisif Fkakkari (Monica Cellio)



# VIII. AGRICULTURE

## INFORMATION CLEARINGHOUSES:

Still have questions?

These websites have pools of information waiting for your click...

+ American Farmland Trust: <http://www.farmland.org/default.asp>

+ ATTRA The National Sustainable Agriculture Information Service:

<http://www.attra.ncat.org>.

Free publications on specific organic and sustainable production methods, crops, market-ing, and organizations. Also has educational programs, apprenticeship listings, and an extensive informational website.

+ American Pastured Poultry Producers Association (APPPA): <http://www.attra.ncat.org>. Resources, infor-mation and networking for those interested in raising birds on pasture.

+ Center for Food Safety: <http://www.centerforfoodsafety.org>. A national non-profit working to curb the proliferation of harmful food production technologies and promote sustainable alternatives.

+ Cornell University Small Farms Program: [http://www.cfap.org/afs\\_temp2.cfm?topicID=29](http://www.cfap.org/afs_temp2.cfm?topicID=29). Information for New Farmers, including help for immigrant farmers and opportunities for training.

+ The Cornucopia Institute: <http://www.cornucopia.org>. The Cornucopia Institute is dedicated to the fight for economic justice for the family-scale farming community. Through re-search, advocacy, and economic development our goal is to empower farmers both politically and through marketplace initiatives.

+ Farm Start: <http://www.farmstart.ca>. Aims to support and encourage a new generation of farmers to develop locally based, ecologically sound and economically viable agricultural enterprises.

+ National Agricultural Library: <http://www.nal.usda.gov/>

+ The Land Institute and Wes Jackson: <http://www.landinstitute.org>. Our purpose is to develop an agricultural system with the ecological stability of the prairie and a grain yield comparable to that from annual crops.

+ New Farm, The Rodale Institute: <http://www.newfarm.org>. NewFarm.org presents compelling success stories with expert resources for crop and livestock production, direct mar-keting, local food systems, policy campaigns and community-building collabora-tions.

+ Western Organization of Resource Councils (WORC): <http://www.worc.org/issues/issues.html>. Committed to build-ing sustainable environmental and economic communities that balance economic growth with the health of people and stewardship of their land, water, and air resources.

+ WiserEarth: <http://www.wiserearth.org>. A community directory and networking forum that maps and connects ngo's and individuals addressing the central issues of our day: climate change, poverty, the environment, peace, water, hunger, social justice, conservation, human rights and more. Also a wiki.

## Hotlines

Sometimes its really nice to be able to just call up an expert. The best is to have a trusted "ex-boss" or mentor that also happens to have a real stake in your success, but thankfully our tax-dollars do go to support a program that provides similar services.

+ Farm Aid: Connects you to direct services of many kinds, including: financial and credit counseling, legal advice, technical assistance, sustainable and organic transition support, new farmer support, disaster and emergency services, and much more....<http://www.farmaid.org> or Call 1-800-FARMAID (1-800-327-6243) or e-mail:[Farmhelp@farmaid.org](mailto:Farmhelp@farmaid.org)

+Soil Association Food and Farming department--become a member and get access to amazing advice: [http://www.soilassociation.org/web/sa/psweb.nsf/B4/producer\\_member-ship.html](http://www.soilassociation.org/web/sa/psweb.nsf/B4/producer_member-ship.html)

+ Master Gardener hotline (530)889-7388



+ The New American Farmer: Profiles of Agricultural Innovation: An excellent collection of geographically grouped profiles of innovative farms published by SARE.

<http://www.sare.org/publications/naf.htm>

+ 1000 Stories The New Farm's archive of "stories about organic, regenerative agriculture that illustrate holistic, values-based ways to farm satisfyingly and successfully."

[http://www.newfarm.org/archive/1000\\_stories/1000stories\\_archive.shtml](http://www.newfarm.org/archive/1000_stories/1000stories_archive.shtml)

+ Clean Energy Farming: Cutting Costs, Improving Efficiencies, Harnessing Renewables

<http://www.sare.org/publications/energy.htm>

+ Finding the Niche: Case Studies of Beginning Small-Scale Farmers <http://www.smallfarm.org/library/niche.pdf> Young Farmers, Creative Beginnings (MOFGA)

<http://www.mofga.org/tabid/458/Default.aspx>

# IX. BIG PICTURE

Through making the decision to farm you are becoming part of an exciting emerging sustainability movement, while simultaneously joining the historically under-appreciated ranks of farmers that have been the backbone of the US since colonization. Given the increasingly grave effect of a growing global food crisis, this is a particularly pivotal time to get into farming. Food crises will not be abated through the opportunist plans of industrial agriculture. Relief happens bit by bit through custom growth that encompasses real people. This means small-scale conscientious agriculture is not just an alternative; it is the way people will survive in a just, healthy and sustainable manner for many generations. It is easy to become food/farm centric and wonder why the US hasn't been especially supportive of its bread bearers in the past. Agriculture has been rigged by other political and economic influences; therefore as an in-dependent farm owner it is important to keep up with the agricultural climate and how national and international policies and circumstances may affect you. The newest Farm Bill was passed in May 2008, with some gains in beginning farmer and rancher support (new loan and development programs) but we still have a long way to go towards fostering a nurturing climate for small-scale farmers. Here is a list of organizations dedicated to keeping tabs on agricultural policy and it's effect on agricultural communities and food systems. Stay informed and active!

## Research, Watchdogs

+ ETC Group- dedicated to the conservation and sustainable advancement of cultural and ecological diversity and human rights. It supports socially responsible developments of technologies useful to the poor and marginalized and addresses international governance issues and corporate power.

<http://www.etcgroup.org>

+ Food First Institute looks at root causes of global hunger, poverty, and ecological degradation and developing solutions in partnership with movements working for social change.

<http://www.foodfirst.org>

+ Institute for Agriculture and Trade Policy (IATP)- promotes rural communities and ecosystems around the world through research and education, science and technology, and advocacy.

<http://www.iatp.org>

+ National Campaign for Sustainable Agriculture- a nationwide partnership of diverse individuals and organizations cultivating grass roots efforts to engage in policy development processes that result in food and agricultural systems and rural communities that are healthy, environmentally sound, profitable, humane and just.

<http://www.sustainableagriculture.net>

+ Oakland Institute: a policy think tank who aims to increase public participation and promote fair debate on critical social, economic and environmental issues in both national and international forums.

<http://www.oaklandinstitute.org>

+ Sustainable Agriculture Coalition- alliance of groups taking common positions on critical federal agricultural and environmental policy concerns. Provides financial and in-kind support for collective representation before Congress and federal administrative agencies. (sign up for their weekly farm bill updates and action alerts!)

<http://www.sustainableagriculturecoalition.org>

## Activism

Let's not forget the social side of agriculture. Agriculture in the US would not exist without the labor of undocumented immigrants. Industrial agriculture has exploited its workers immeasurably. Small-scale agriculture makes us more accountable in our relationships co-workers, peers, partners, and consumers...but let's not forget about the inequality that persists in modern agriculture. Below is a list of organizations working for change, social justice and solidarity within agriculture.

+ Alliance for Fair Food: We promote principles and practices of socially responsible purchasing in the corporate food industry that advance and ensure the human rights of farm workers at the bottom of corporate supply chains. <http://www.allianceforfairfood.org/>

+ Coalition of Immokalee Workers (CIW) fight for, among other things: a fair wage for the work we do, more respect on the part of our bosses and the industries where we work, better and cheaper housing, stronger laws and stronger enforcement against those who would violate workers' rights, the right to organize on our jobs without fear of retaliation, and an end to indentured servitude in the fields. Sign CIW's national petition to "end modern day slavery and sweatshop in the fields." <http://www.ciw-online.org/>

+ Glynwood Center: We aim to listen—carefully—to the voices of community leaders as they express their visions, concerns, and needs. In response, we have created programs to train leaders, catalyze community change from the inside out, present innovative new ideas, and supply resources to those who strive to resolve the tension between development and conservation. <http://www.glyn-wood.org/programs.htm>

+ Student/Farmworker Alliance: A national network of students, youth and other community members organizing with farm workers to eliminate sweatshop conditions and modern-day slavery in the fields. <http://www.sfalliance.org/>

+ La Via Campesina: The international peasant movement. [http://viacampesina.org/main\\_en/index.php](http://viacampesina.org/main_en/index.php)

+ National Family Farm Coalition: The North American "branch" of Via Campesina. "We envision empowered communities everywhere working together democratically to advance a food system that ensures health, justice, and dignity for all." <http://www.nffc.net/>

+ Building a Local Food Networks: toolkit for organizers <http://www.ecotrust.org/foodfarms/localfoodnetworks.html>

