Alternative Crops & Enterprises for Small Farm Diversification

About this list:

This list of alternatives was compiled using AFSIC reference request files, the subject files in our office, as well as previously compiled lists, most notably “Innovative Farming Idea List,” (1987) compiled by Nancy Grudens Schuck, Farming Alternatives Project, Cornell University and “Ideas for Alternative Agricultural Enterprises,” (1996) put together by the Missouri Alternatives Center. [See their Web site’s database of Extension and related on-line publications about alternatives: http://agebb.missouri.edu/mac.] This list is not comprehensive, but presents some of the more accessible innovations available to farmers.

What can alternative crops and enterprises do for my farm?

The “Diversifying Cropping Systems” Bulletin for farmers and agricultural educators is a primer on planning diversification with alternative crops, agroforestry, and cover crops. This Sustainable Agriculture Network resource features “factors to consider before diversifying, specific diversification strategies and expert sources of information.”

http://www.sare.org/publications/diversify.htm
Where can I find information on agricultural alternatives?

1. To find out more about alternatives suited to your area, start by contacting your local or State Extension office. A listing of Extension Office directories and alternative agriculture publication sites is included below.


3. *Agricultural Sustainability Notes Series: Questions to Ask About Alternative Crops* (Washington State Univ.) lists questions on economic and production issues to explore before selecting a specific crop alternative. [http://pnw-ag.wsu.edu/AgHorizons/notes/sr3no1.html](http://pnw-ag.wsu.edu/AgHorizons/notes/sr3no1.html)


5. *Alternative Agriculture in Maryland: A Guide to Evaluate Farm-Based Enterprises* (University of Maryland) provides information, worksheets, and inventories on identifying compatible enterprises and required resources, planning specialty enterprise budgets, and other business and marketing considerations. [http://agmarketing.extension.psu.edu/Business/PDFs/farmaltworkbk.pdf](http://agmarketing.extension.psu.edu/Business/PDFs/farmaltworkbk.pdf)

6. *A PRIMER for Selecting New Enterprises for Your Farm* (University of Kentucky), a tool for evaluating new enterprises for a farm or family business, is based on worksheets used to evaluate the “Profitability, Resource requirements, Information needs, Marketing decisions, Enthusiasm for, and the Risk associated with a new enterprise.” [http://www.uky.edu/Ag/AgEcon/pubs/ext-aec/ext2000-13.pdf](http://www.uky.edu/Ag/AgEcon/pubs/ext-aec/ext2000-13.pdf)


9. Additional resources on specific agricultural alternatives may be found at your State Department of Agriculture, crop and livestock associations, searchable publication lists and databases, as well as at your local and/or university library. See *Resources*, below.
**Field Crops:**

*Feed and Forage...*

- Bird seed (sunflower, proso millet, canary grass, etc.)
- Forage brassicas - turnips, rutabagas
- Kochia

- Medics
- Sainfoin
- Switchgrass

*Fiber, Fuel, Edible and Industrial Oils...*

- Borage
- Broomcorn
- Canola
- Castor beans
- Comfrey
- Corn (for oil)
- Crambe
- Cuphea
- Flax
- Guayule
- Jojoba

- Kenaf
- Lesquerella
- Lupine
- Meadowfoam
- Milkweed
- Perilla
- Safflower
- Sesame
- Sunflowers
- Vernonia

*Food Grains, Pseudocereals, Legumes, etc...*

- Adzuki beans
- Amaranth (food and feed)
- Barley
- Buckwheat
- Dry edible beans (fieldbeans)
- Einkorn
- Emmer
- Field peas (food and feed)
- Garbanzo beans (chickpeas)
- Hops
- Indian corn
- Jerusalem artichokes (food and feed)
- Kamut
- Lentils
- Malting barley
- Mung beans

- Organically grown grains of all types
- Peanuts
- Pearl millet
- Popcorn, white and colored
- Psyllium (medicinal)
- Quinoa
- Seed production - registered and certified seed, turfgrass, etc.
- Sesame (seeds)
- Sorghum (syrup)
- Soybeans, incl. natto soybeans for tofu, tempeh; and Edible soybeans (edamame)
- Spelt
- Triticale
- Wheatgrass
- Wild rice
Specialty and Ethnic Vegetables:

[See also Field Crops]
• Asparagus
• Baby vegetables
• Cabbage
• Carrots
• Celery
• Chinese water chestnuts
• Cole crops (broccoli, cauliflower, Brussels sprouts, kohlrabi)
• Corn, miniature
• Fenugreek
• Edible flowers
• Garlic
• Gourds, ornamental
• Gourmet vegetables
• Greenhouse production for out-of-season crops
• Heirloom varieties of any vegetable
• Herbs - culinary and medicinal

Fruits and Nuts:

• Apples, esp. Heirloom varieties
• Asian pears
• Brambles - blackberries, raspberries, loganberries, black raspberries, etc.
• Blueberries
• Cranberries, currants
• Elderberries
• Gooseberries

Horticultural/Nursery:

• Bedding plants - annual flowers, herbs, etc.
• Field grown cut flowers
• Field grown mums
• Flowers for drying
• Greenhouse production
• Hydroponic production

• Horseradish
• Luffa gourds
• Mushrooms- agaricus, shiitake, oyster, morel, etc.
• Onions (transplants, shallots, sweet, early)
• Organically grown vegetables of all types
• Oriental vegetables
• Peas and pea shoots
• Peppers - specialty types (purple, hot, etc.)
• Pumpkins
• Red beets
• Salad greens - mesclun
• Sprouts (alfalfa, bean, etc.)
• Squash
• Sweet corn
• Sweet potatoes
• Tomatoes - specialty types
• Truffles
• Wasabi

• Kiwi, hardy
• Lingonberries
• Melons - specialty types
• Paw paw
• Rhubarb products
• Strawberries, day neutral types
• Table grapes, seeded and seedless
• Wine grapes for home brewing market

• Organically grown bedding plants and fruit trees
• Potted annuals
• Native plants/wild flowers and seeds
• Regionally hardy shrubs and perennial flowers
**Agroforestry/Forest Products:**

- Bamboo
- Christmas trees
- Firewood
- Paulownia
- Sawlogs
- Tree seed collection
- Wild nuts

**Livestock/Animals:**

*Game Related...*

- Beefalo (hybrid of buffalo and beef)
- Buffalo (American Bison)
- Deer - fallow deer, red deer
- Elk (wapiti) for meat and antlers
- Fish bait - worms, minnows
- Pheasant for release/restocking programs and meat

*Exotic Livestock/Minor Breeds/Special Uses...*

- Alpacas and llamas for pack animals, hair, and pets
- Boar
- Butterflies (for gardeners)
- Fox, red, silver, and blue
- Goats for milk, meat, and hair (Angora)
- Horses - draft horse breeding, miniatures, exotics
- Mink
- Mules and donkeys
- Ostriches, rheas, emus
- Rabbits for meat, lab animals, and hair (Angora)
- Reindeer
- Sheep/Lambs for meat, wool, milk (for cheese)
- Snails
- Veal, conventional and certified
- Water buffalo
- Worms (for composting)

*Poultry...*

- Balut (duck eggs partially incubated)
- Chicken eggs partially developed (for Asian markets)
- Doves
- Duck - meat and paté
- Free range poultry of all types
- Geese
- Guinea fowl
- Organically raised poultry of all types
- Peafowl/Peacocks (feathers)
- Pigeons
- Quail/Squab
- Turkey

*Aquaculture/Fishfarming...*

- Aquaponics (combining aquaculture and hydroponic operations)
- Bass, Trout, Catfish, Crayfish, Tilapia
- Watercress and other aquatic plants
Pet and Medicine Related...

- Dogs (guardian)
- Guinea pigs
- Pet foods - crickets, mealyworms, etc.

Farm and Home Enterprises:

Services...

- Antique shop/Antique restoration
- Boat storage
- Direct marketing operations - U-pick, Community Supported Agriculture (CSA), farmstand
- Child care in country setting
- Composting services and products
- Custom machinery work
- Custom planting and care of window boxes and container annuals
- Custom planting and care of vegetable gardens
- Custom slaughter
- Farm sitting
- Gift shops
- Pet motels for large as well as small animals
- Religious services held on farm, e.g. sunrise Easter services, weddings
- Restaurant
- Seed and supplies distributor
- Small engine repair
- Taxidermy

Recreation and Education...

- Barn dances
- Bed and breakfast
- Campground
- Chuck wagon
- Fee hunting and fishing/game farms
- Hunting, fishing, and nature hike guides
- Lectures on herbs, gardening at farm
- Museum of old farm equipment on working farm
- Petting zoo
- Sleigh rides with work horses
- Tours for public, school children
- Trail rides
- Vacations on farm
- Wagon trains

Value-added Products/On-farm Processing...

- Cheese
- Cider and other apple products
- Confections and candles
- Corn snack foods
- Crafts
- Dried flowers, cultivated, arid, wild
- Dried Fruits
- Fresh or stone ground grains
- Furniture, e.g. outdoor chairs, picnic tables
- Honey and beeswax products
- Meat processing, e.g., jerky
- Sawmill
- Soapmaking
- Tanning hides
- Toys from wood
- Wheatweaving
- Winemaking
- Wool processing and spinning
Resources

Extension Office or Land Grant University Directories and Publication Sites

1. Cooperative State Research, Education, and Extension Service contacts
   http://www.csrees.usda.gov/qlinks/partners/state_partners.html

2. E-answers is a searchable Web site for research-based information on a wide range of Extension or Outreach-oriented subjects.
   http://e-answers.adec.edu/

3. Missouri Alternatives Center
   http://agebb.missouri.edu/mac/index.htm
   MAC Link List of Extension information on Alternatives
   http://agebb.missouri.edu/mac/links/index.htm

4. Alabama Cooperative Extension (Auburn Univ.)
   Publications (see Agriculture)
   http://www.aces.edu/department/extcomm/publications/

5. Univ. of Arkansas
   Arkansas Agriculture: Specialty Agricultural Production
   http://www.aragriculture.org/specialty/
   Searchable Publications Database
   http://www.uaex.edu/Other_Areas/publications/default.asp

6. Univ. of California
   Agriculture and Natural Resources Publications
   http://anrcatalog.ucdavis.edu/default.aspx
   Agronomy Research and Information Center
   http://agric.ucdavis.edu/home.htm
   Sustainable Agriculture Research and Education Program
   http://www.sarep.ucdavis.edu/

7. Colorado State Univ. Cooperative Extension
   Publications by title
   http://www.ext.colostate.edu/pubs/pubsb.html#ag
   Specialty Crops Program
   http://www.specialtycrops.colostate.edu/
EDIS topics, including alternative crops and livestock
http://edis.ifas.ufl.edu/topic.html

Alternative Opportunities for Small Farms
http://edis.ifas.ufl.edu/TOPIC_SERIES_Alternative_Opportunities_for_Small_Farms

College of Agriculture and Environmental Sciences. Publications
http://pubs.caes.uga.edu/caespubs/pubs/pubsubj.html

College of Tropical Agriculture and Human Resources. Free Publications
http://www.ctahr.hawaii.edu/ctahr2001/PIO/FreePubs.asp

Animal Science
http://www.extension.uidaho.edu/animals.asp

Crop Production
http://www.extension.uidaho.edu/crops.asp

Illinois Agronomy Handbook: Alternative Crops (See chapter 7)
http://iah.ipm.uiuc.edu/

Agriculture and Natural Resources. Extension Topics
http://www.extension.iastate.edu/ag/topics.html

Extension Publications
https://www.extension.iastate.edu/store/

Kansas Center for Sustainable Agriculture and Alternative Crops (KCSAAC)
http://www.kansassustainableag.org/

Reference Library
http://www.kansassustainableag.org/library.htm
15 Univ. of Kentucky
Cooperative Extension Service and Kentucky Agriculture Experiment Station. Online publications
http://www.ca.uky.edu/age/pubs/pubs.htm

New Crop Opportunities Center. Crop Profiles
http://www.uky.edu/Ag/NewCrops/intro.html

16 Louisiana State University Ag Center. Research and Extension
Crops and Livestock

17 Univ. of Maine
Cooperative Extension
http://extension.umaine.edu/

Animal, Veterinary and Animal Sciences Links
http://www.umaine.edu/livestock/links.htm

18 Univ. of Maryland. Extension Publications
http://pubs.agnr.umd.edu/

19 Univ. of Massachusetts
Extension Agriculture and Landscape Program
http://www.umass.edu/agland/ (Select subject, then select the “take me directly to...” link.)

20 Michigan State Univ. Extension
Area of Expertise Teams
http://web1.msue.msu.edu/aoe/

Searchable Extension Database
http://www.msue.msu.edu/portal/default.cfm?pageset_id=25744&page_id=25794
&msue_portal_id=25643

21 Univ. of Minnesota. Extension
Farm: Crops, Specialty and Alternative
http://www.extension.umn.edu/topics.html?topic=4&subtopic=3

Farm: Alternative Animal Enterprises
http://www.extension.umn.edu/topics.html?topic=4&subtopic=118

22 Mississippi State Univ. Cooperative Extension.
Mississippi Agricultural and Forestry Experiment Station. MSUCares
http://msucares.com/search.html
23 Univ. of Missouri
XPLOR – Agriculture Publications
http://extension.missouri.edu/xplor/agguides/

Alternative Crops Page
http://www.psu.missouri.edu/cropsys/Alternative_Crops/

24 Montana State Univ.
Cooperative Extension Service. Agriculture publications
http://extn.ms.montana.edu/publications.asp

Specialty Crops
http://ag.montana.edu/warc/research/horticulture/speciality.htm

25 Univ. of Nebraska. Institute of Agriculture and Natural Resources
Specialty Crops
http://lancaster.unl.edu/ag/crops/special.shtml

Specialty Livestock
http://lancaster.unl.edu/ag/livespec.shtml

Publication Catalog Index
http://www.ianrpubs.unl.edu/epublic/pages/index.jsp

26 Rutgers State Univ. of New Jersey Cooperative Extension. Publications
http://njaes.rutgers.edu/pubs/default.asp

27 Cornell Univ. Small Farms Program
Alternative Enterprises

28 North Carolina State Univ. and Cooperative Extension
Horticulture Information Leaflets
http://www.ces.ncsu.edu/hil/

Web Resources - Alternative Crops
http://www.ces.ncsu.edu/chatham/ag/SustAg/altcropslinks.html

Specialty Crops
http://www.cals.ncsu.edu/specialty_crops

29 North Dakota State Univ. Extension
New and Alternative Crops
http://www.ag.ndsu.edu/pubs/alternative.html
30 Ohio State Univ. Extension
Crops and Livestock
http://extension.osu.edu/crops_and_livestock/index.php

College of Food, Agriculture and Environmental Sciences (Farm resources)
http://ohioline.osu.edu/lines/farm.html

31 Oklahoma State Univ.
OSU Extension Facts
http://pods.dasnr.okstate.edu/docushare/dsweb/View/Collection-297

32 Oregon State Univ. Extension Service
Agriculture Publications and Multimedia Catalog
http://extension.oregonstate.edu/catalog/results.php?cat=Agriculture

Crop Extension Programs
http://cropandsoil.oregonstate.edu/extensio/crops.html

Commercial Production Vegetable Guides
http://hort-devel-nwrec.hort.oregonstate.edu/vegindex.html

Extension Service Publications
http://extension.oregonstate.edu/catalog/results.php?cat=Agriculture

Northwest Berry and Grape Information Network
http://berrygrape.oregonstate.edu/

Oregon Small Farms
http://smallfarms.oregonstate.edu/

33 Penn State Univ.
Agricultural Alternatives magazine
http://agalternatives.aers.psu.edu/

Cooperative Extension. Agricultural Alternatives
http://susag.cas.psu.edu/prod_alternatives.htm

College of Agricultural Sciences. Publication Subject Index
http://pubs.cas.psu.edu/Publications.asp

34 Clemson Univ. Cooperative Extension
South Carolina Growing
http://www.clemson.edu/scg/

Publication search
http://dprod4.clemson.edu/olos/asp/searchmain.asp
35 Univ. of Tennessee/Tennessee Farm Bureau
   Center for Profitable Agriculture
   http://cpa.utk.edu/default.htm

36 Texas A & M Univ.
   Alternative Agricultural Enterprises
   http://aggie-horticulture.tamu.edu/alternatives/alternativelinks.html

   Horticultural Alternatives for Texas Agriculture
   http://aggie-horticulture.tamu.edu/alternatives/hortalternatives.html

   Specialty Vegetables in Texas
   http://aggie-horticulture.tamu.edu/extension/specialty/index.html

37 Virginia State Univ., and the Virginia Polytechnic Institute and State Univ.
   Cooperative Extension resources by subject
   http://www.ext.vt.edu/resources/

   http://cru84.cahe.wsu.edu/cgi-bin/pubs/  (see “topics” on left sidebar)

   Specialty Crops Information Sheets
   http://www.island.wsu.edu/CROPS/

39 West Virginia Univ. Cooperative Extension
   Center for Agriculture, Natural Resources and Community Development
   http://www.wvu.edu/~agexten/

40 Univ. of Wisconsin Cooperative Extension
   NewFarm Resource Directory
   http://www.newfarm.org/cms/resource.php
Other Resources for Agricultural Alternatives

1. The National Agricultural Library's AGRICOLA database
   http://agricola.nal.usda.gov

2. The Agricultural Network Information Center (AgNIC) includes a searchable database.
   http://www.agnic.org

3. The Agricultural Marketing Resource Center (AgMRC) identifies directories of value-added agriculture resources.
   http://www.agmrc.org/directories__state_resources/

4. Appropriate Technology Transfer for Rural Areas (ATTRA)
   http://www.attra.org/

5. Aquaculture information sources include:

6. The American Livestock Breeds Conservancy
   http://www.albc-usa.org/

7. Mid-Atlantic Regional Fruit Loop. (Cooperative project of State universities)
   http://www.caf.wvu.edu/kearneysville/fruitloop.html

8. State Departments of Agriculture (USA.gov)
   http://www.usa.gov/Agencies/State_and_Territories.shtml

9. U.S. Department of Agriculture, Natural Resources Conservation Service
   Plants Database
   http://plants.usda.gov/

10. Univ. of California
    Fruit & Nut Research and Information Center
    http://fruitsandnuts.ucdavis.edu/ (select Fruits & Nuts)

    Small Farm Center
    Specialty and Minor Crops Handbook
    http://www.sfc.ucdavis.edu/Docs/specialty_crops.html
    Library
    http://www.sfc.ucdavis.edu/library/
    and free online publications
    http://www.sfc.ucdavis.edu/docs/free.html
11 Univ. of Florida, Southwest Florida Research & Education Center
*Vegetable Crop Budgets*
http://www.imok.ufl.edu/LIV/groups/economic/budglnks.htm

12 Illinois State Water Survey
*Alternative Crop Suitability Maps*
http://www.sws.uiuc.edu/data/altcrops/

13 Maryland Small Ruminant Page
http://www.sheepandgoat.com/

14 Univ. of Minnesota
Minnesota Grown Opportunities. Agricultural Diversification
Fruits, Vegetables and Other Crops
http://www.mda.state.mn.us/protecting/sustainable/mfocrops.htm

Livestock and Poultry Options
http://www.mda.state.mn.us/protecting/sustainable/mfoanimals.htm

15 Univ. of Minnesota. Minnesota Institute for Sustainable Agriculture
Alternative Crops
http://www.misa.umn.edu/Alternative_Crops.html

Alternative Livestock Systems
http://www.misa.umn.edu/Alternative_Livestock.html

16 Ohio State Univ.
*PlantFacts* Factsheet Database
http://hcs.osu.edu/plantfacts/

17 Oklahoma State Univ.
*Breeds of Livestock*
http://www.anpi.okstate.edu/breeds/

18 *Permaculture Information Web* database
http://permaculture.info/

19 Plants For A Future database
http://www.ibiblio.org/pfaf/D_search.html
http://www.pfaf.org/

20 Purdue Univ., Center for New Crops and Plant Products
*NewCROP*
http://www.hort.purdue.edu/newcrop/default.html

*CropSEARCH*
http://www.hort.purdue.edu/newcrop/SearchEngine.html
21  Univ. of Wisconsin Cooperative Extension, Univ. of Minnesota Extension Service, and the Center for Alternative Plant and Animal Products
   *Alternative Field Crops Manual*
   http://www.hort.purdue.edu/newcrop/afcm/index.html

22  Alberta Agriculture
   *Agriculture Diversification Ventures*
   http://www1.agric.gov.ab.ca/$department/deptdocs.nsf/all/apa2312

   *Special Crops Web site*
   http://www.agric.gov.ab.ca/app21/seltopic?cat1=Crops&cat2=Special+Crops&page=true

23  Manitoba Agriculture and Food
   *Alternative Crops*
   http://www.gov.mb.ca/agriculture/crops/index.html

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