

The Garden Guide

“But the act I want to talk about is growing some, even just a little, of your own food... Measured against the Problem We Face, planting a garden sounds pretty benign, I know, but in fact it’s one of the most powerful things an individual can do -- to reduce your carbon footprint, sure, but more important, to reduce your sense of dependence and dividedness: to change the cheap-energy mind.”

- **Michael Pollan**



A college garden is a powerful place. In a garden, you dig and plant and talk about the value of food. You eat tomatoes and strawberries fresh from your soil. You learn how to grow food yourselves – and you learn how to make decisions for yourselves. A college garden is democracy in action. Sure, if you're lucky, the administration might pay for your seeds, but you, the students, are ultimately the ones calling the shots. A college garden is a powerful place to do powerful things.

So even if the process of starting a garden at your school seems a little daunting after reading this manual, the rewards of a garden are rich. Your college garden will make a little plot of self-sufficiency and deliciousness in today's landscape of global warming, monocultures, and energy crises. And once you've made your plot, you might inspire others to carve out plots of their own. So take care in your decisions and take joy from your planting – because your little plot matters. So start with the basics – find a little good land, some committed kids, and some sweet seeds – and you'll be sowing more than you know.

This manual focuses on how to establish a small-scale garden at your college or university. But once you've got a small-scale garden going, there's still plenty more you can do. Hopefully, in months to come, this guide will grow to include advice on establishing a market garden, a Community Supported Agriculture program (CSA), or a farm with livestock. For now though, this guide (like your garden) is starting small. Still, if you're ready to grow further, don't hesitate! Look into getting chickens or keeping bees. Get a stand at a local farmer's market. Read up on ways to fund and maintain a CSA -- check out books like Elizabeth Henderson's *Sharing the Harvest: A Guide to Community-Supported Agriculture*. There are always more people you can involve, more beds you can raise, and more garden-grown tomatoes you can taste.

GETTING STARTED

Get your facts and your plan straight: establish a group, talk to local farmers, and generate a buzz among students. Reach out to other college gardens, too – while doing the research might seem useless, you'll be more prepared to deal with obstacles if you've read up on other college gardeners' experiences.

Establish core group Some college gardens get started with 2 or 3 students, some get started with 15. Your group size can work so long as you're all committed and motivated. Solidify and consolidate interested parties: make an email list, keep in contact, and set up regular meeting times. Don't let your garden idea get lost in the flurry of college obligations.

ESTABLISH GROUP GOALS What do you imagine this garden looking like and how do you imagine it functioning? Get everyone on the same page – a little discussion and compromise now will save many disagreements later.

DIVIDE UP THE WORK Set a timeline: what do you need to accomplish and when so that you can begin planting in the spring?

Make Connections

STUDENTS Talk to students who have taken activist roles on campus—how do they advise dealing with your administration? If your school has a database of senior theses or dissertations, find theses relating to agriculture and experiential learning. If your college has an agriculture school, get advice from these students.

LOCAL GROWERS Local growers can help you plant in your region, and they can also help you judge whether your garden plan is feasible. Having local contacts will come in handy later on; these contacts can help you out when you're stymied by your blighty chard or confused about the finer points of crop rotating. If you can't find any local contacts through the links provided, contact your Cooperative Extension office (<http://www.csrees.usda.gov/Extension/index.html>) – they'll put you in touch with local agricultural help – just make sure to ask for small-scale, sustainable and/or organic farmers.

PROFESSORS If you can get faculty on your side, you are much more likely to get administrative approval. Email or talk to professors about the mission of the garden and how it might tie in to their field of focus. If they support the idea, maintain and record these contacts. Don't be afraid to approach tenured faculty – these faculty have the most influence in the school and the administration likes to keep them happy.

FOOD SERVICES Talk to your dining service manager if you are thinking about giving or selling your harvest to the dining halls. Would he/she be willing to buy your harvest for the dining halls? Where on campus could it best be used – cafés, dining halls, retail units? Which crops would be most useful to them in the quantity that your farm/garden would offer?

If your members don't see each other much, establish an open Gmail account; members can post and store documents, create calendars, and communicate easily with everyone involved.

Find local experts online through these databases:

Local farms:

<http://www.localharvest.org/organic-farms/>

Local college farms:

http://www.rodaleinstitute.org/ffc_directory

Local community gardens:

<http://acga.localharvest.org/>

Local farmers' markets:

http://farmersmarketsusa.org/find_market.php

Foods that are easy to grow but expensive to buy are great crops to plant for the dining hall. See whether your dining hall is interested in specialty greens, herbs, or beans.

GROUNDSKEEPERS/MAINTENANCE STAFF Groundskeepers can help you find spaces on campus and maybe even loan you tools. Emphasize that the garden will not require extra work from them.

Generate campus enthusiasm

CONDUCT SURVEYS Conduct a survey to find out whether students would support a college garden (take their emails down if they're interested in helping). Data from these surveys and polls (if positive) can give the college proof of the campus' need for a garden.

LINK WITH OTHER CLUBS Some of your biggest allies might be other engaged students on campus. Talk with them about how the garden might be able to benefit their work as well.

PUBLICIZE Write a letter to the school newspaper, make an announcement over the school radio station, put up posters, hand out flyers, or ask professors if you can make an announcement about the farm in class. Make a Facebook group, too.

Make a contact list

Keep track of those who are working with you, supporting your work, or have proved useful or helpful during this project. You will have plenty of uses for this network as your garden grows.

PROBLEM SOLVING:

FINDING LAND, MONEY AND SUPPORT

Finding sites Begin by looking for open spaces on campus and nearby. If your school has a master plan, look it up – that way, you won't set your heart on a parcel that the college already has a plan for. If you can't find any land to begin with, here are some potential solutions, broken down by campus location:

RURAL

- connect with your college's environmental or agricultural programs - could the garden/farm land be used for academic research or for trying sustainable agricultural techniques?
- talk to local farmers – large farms in the area are sometimes willing to lease bits of land from their farm that would otherwise lie fallow
- check out off-campus spots: if you have space off campus, would high visibility events (music performances, dinners, film screenings) put the farm on peoples' radars?

SUBURBAN

- start a kitchen garden outside of your dining hall to supplement dining hall food with fresh herbs or produce
- find an under-utilized patch of sunny grass. Can you reclaim an out-of-the way green, backyard, or field? Don't be afraid to push for large, prominent, on-campus sites; you can always settle for something smaller later
- offer to start your garden off campus - just make sure transportation to the site is easy. If your campus is bike-centric, would setting up a bike rack in your new space encourage students to come over?

URBAN

- convert concrete spaces by breaking up the concrete, bringing in soil, and building raised beds (if you are using the soil underneath concrete, be very careful about soil contamination).
- research green roofs to bypass the urban space crunch.
- find out who owns vacant lots near campus - sometimes high schools or other establishments let their vacant lots get greened
- maximize your size: read up on vertical gardening and check out the principles of square foot gardening. Try edible landscaping – grow food by choosing edible ornamentals.

Evaluating Sites No site will be perfect, but as you find land, record each site's pros and cons.

ACCESS TO SUN Ideally, you want some spots that get around six hours of full sun.

ACCESS TO WATER Is there a water spigot close by or a natural water source?

SOIL QUALITY Is the soil good? (good soil feels sort of like bread crumbs)

OWNERSHIP Who owns the land? Would you be able to use it?

SIZE Is this site big enough to be worth it – to build community and generate enthusiasm?

Some benefits of green roofs:

- regulate building temperature
- clean grimy city air
- transform roofs into productive and inviting spaces
- retain and control storm water runoff

For more information:
www.greenroofs.org

PROXIMITY TO CAMPUS How close is the land to campus? How easy is it for folks to get there? By bike? Walking?

NEIGHBORS Would neighbors to the plot support a garden? Is there heavy traffic surrounding the site?

Finding money The amount of funding you need for your garden will vary, obviously, on the scale of your garden. For smaller-scale gardeners, if you can borrow tools from the groundskeeper and get raised-bed lumber donations from the local hardware store, you can ask green clubs, green campus initiatives, or the administration to fund what few expenses you have. For larger operations, you'll need to find a good chunk of money to cover your expenses. Before you look to outside donors, check to see what money is available within the school:

ADMINISTRATION AND STUDENT COUNCIL GRANTS

ENVIRONMENTAL STUDIES DEPARTMENT GRANTS OR OTHER RELEVANT DEPARTMENT GRANTS

CLUBS/EXTRACURRICULAR CONTRIBUTIONS Clubs with similar interests, like an environmental club, often contribute money from their budget.

ALUMNI Send green-minded alumni letters to see whether they might support you.

DINING SERVICES The dining hall might pay you for your crops – and the dining hall will get good publicity if they incorporate campus-grown food into their dishes!

SENIOR CLASS GIFTS

FUNDRAISERS Host a local food night and charge admission. Sell pies or jam made with local fruit. Have a concert at the garden site.

If school funding isn't available, poke around the web to see which foundations offer money for agriculture education advances:

-Sustainable Agriculture Research Education (SARE) funding opportunities: <http://www.sare.org/grants/>

-Go on websites like grants.gov--

<http://www07.grants.gov/search/basic.do>

-The Foundation Center where you can search for grants using terms like "sustainable agriculture" or "agriculture."

<http://foundationcenter.org/>

LOBBYING THE ADMINISTRATION

Although many administrations recognize that a college farm is a good idea, most are reluctant to give money and space to the project. When you talk to the administration, make sure to frame your ideas in a way that will appeal to them. Framing your idea for the administration is not selling out; it's just a practical way to get support.

Use their priorities, not yours The college has different priorities from you. While you think that a farm would be good for a number of environmental and social reasons, the college has other concerns. Read recent speeches by the college president or deans and notice what goals they have cited recently for the university. Can you incorporate these goals or other college "core values" into the garden's mission? If your college president is one of the 550 college presidents who have signed the Presidents' Climate Commitment, you might mention that a garden is right in line with these commitment's priorities, particularly the commitment's promise to take "Actions to make climate neutrality and sustainability a part of the curriculum and other educational experience for all students."

Capitalize on intercollegiate competition More than ever, colleges are competing to attract the best applicants. Use this competition to your advantage! Mention the names of other colleges that have recently started gardens or farms. Remind your college that college farms are big selling points in an admissions packet – it's a chance to show that they are both community and environmentally minded.

Anticipate their objections Your college may be concerned about aspects of the garden that have not worried you. Anticipate and address these objections to calm administrative fears. For instance, many colleges and universities worry a lot about the aesthetics of its campus. Stress that the garden will be attractive – would planting ornamentals, an edible flower garden, or a decorative border be a good way to show the administration your awareness of the campus aesthetic? Discuss your strategies for pest management, brainstorm solutions for making a compost heap inconspicuous, and assure the administration that tools will not be left lying around.

Emphasize community support Although sometimes it may not seem like it, the priority of a college or university is to keep its students and faculty happy. If you have surveys that show student and faculty demand and support for a farm, report them and make these statistics available. The administration responds to statistics and to the community voice; give them hard facts to indicate that the farm will be used and enjoyed.

Show them you mean business For many schools, even such thoughtful and savvy attempts to lobby the administration will fall flat. Some colleges just don't care about your do-gooder attempts to save the planet. This is when you should think about abandoning the officially sanctioned channels and experiment with some direct action. After you've identified the decision maker who can get you what you want (even if they've refused you so far), put the pressure on them. Make sure you have student support behind you, then consider: Will 100 phone calls directly to make office change their mind? Will a petition with 500 signatures taped

"We want a garden on the White House lawn. We want somebody to symbolically show that we want to become stewards of the land."

-Alice Waters

"The movement to establish gardens, therefore, and to have the children work in them is just as real and patriotic an effort as the building of ships or the firing of cannon."

-Woodrow Wilson, 1918

to their door make them reconsider? How about a wheelbarrow full of compost delivered fresh to their door every morning?

WRITING A PROPOSAL

Writing an effective proposal can be time-consuming and complicated. If your school is smaller or communication between the administration and student groups is frequent, you might not need a proposal – a Powerpoint presentation, or just a detailed statement will do. In most cases, though, a proposal for the administration is a concrete way to show that you're thinking seriously and thoughtfully about what a farm or garden entails. Address the school's potential arguments in your proposal explicitly (eg, if you think your school will mainly have concerns about available space, include a detailed discussion of space concerns and potential spaces).

Consider the audience You are writing this proposal so you can get support from the university. If you can, find a smaller committee (like a Sustainability Committee or a group of involved teachers) to evaluate your proposal so that you can strengthen the proposal before you bring it to the administration.

Touch on important aspects of the garden Although the actual format of the proposal is up to you, complete proposals often include:

MISSION STATEMENT Keep this concise and lively. Incorporate both the group's priorities and the school's priorities to generate a persuasive argument.

AN OVERVIEW OF THE BENEFITS OF A COLLEGE GARDEN Make this summary clear and concise so that all readers can quickly understand what the garden will do for the school.

ACADEMICS Stress the importance of incorporated curricula and experiential learning; record current classes that could benefit from a campus garden.

COMMUNITY Write down ways that you'll maximize student involvement.

GARDEN MANAGEMENT AND LABOR Will students volunteer or do work study? How will the garden be cared for in the summer?

FARMING PRACTICES Are you going organic? Totally sustainable? Write it down – the college should know!

FOOD PRODUCTION AND USE OF HARVEST Where is your food going? What crops will you grow? Would it be useful to grow crops for educational/practical purposes? Are you planning on growing for just the season, or will you grow year-round?

SITE DISCUSSIONS / FIELD LAYOUT Detail a few potential sites so that the administration can weigh in on the options.

SUGGESTED TIMELINE When do you aim to be breaking ground? Where do you see the garden in one year, two years?

PROSPECTIVE BUDGET Generate cost estimates for the establishment and the maintenance of the project.

GARDEN CONTACT LIST Use all the clout you have: list your heavy-weights! Include statements of support if you have them and relevant student surveys.

Often, detailed analyses and estimates (like the prospective budget,

suggested timeline, and site analyses) are attached to the proposal as appendices. That way, the specifics are available to reference but do not distract from the main thrust of the proposal.

Borrow ideas from other proposals Check out other proposals and gauge their efficacy; which ideas, layouts, or arguments are worth borrowing? (See Appendix D for sample proposals).

Re-evaluate your garden goals After you have submitted the proposal, take a little pause. Get some distance on the whole project, gain a little perspective, buy a pair of overalls. Once you've taken a breather, think through your idea again. How was the proposal received? If the administration / student governing body / grant committee approved it, hurrah! But if they didn't, all is not lost:

PROPOSAL MODIFICATION AND COMPROMISE Can you modify your plan and your proposal to get the college's approval? Proposal reviews are an on-going process; getting the college to say yes may depend on your willingness to compromise a little. If the college rejected your proposal because they didn't have land on campus for you, offer to move to an off-campus site. A garden somewhere is better than a garden nowhere. Earn the college's trust -- if you prove yourself by successfully establishing your garden off campus, colleges are more likely to offer you a little land on campus in a few years.

PLAY HARD BALL Many times a "no" means "it's not a priority for us." Think about how you can best show them that it should be a priority. Putting up posters and gathering petition signatures can be great ways to drum up support. Inspire the administration with some guerilla gardening – dig up the grass in a centrally located area and plant a garden by moonlight.

REBOOT If you determine that your college really doesn't have the resources, time, or inclination to help you with your garden, it's probably best not to spend any more time trying to convince them. Lots of gardens started without administrative support. You will need to craft a new strategy for getting a farm that doesn't involve the administration.

PEOPLE MANAGEMENT

As you finish with the approval process, discuss with the gardening group how you want your garden to be managed and kept up. Think carefully about these decisions – a thoughtful management and labor system ensures good leadership, implementation of fresh ideas, and a crew that won't burn out. Bad management, by contrast, increases the likelihood that the garden falls into disrepair and vanishes after you graduate.

Ultimately, only your group can decide what kind of management structure works best. It's less about what particular management structure you choose and more about settling on one system and settling on that system as a group. That way, no one resents the structure in place and everyone is clear on his/her own role within the group.

Define management roles Establish positions that have clearly designated responsibilities. Students elected to those positions need a clear idea of what their positions entail. Delegating tasks makes students personally responsible for their work.

MANAGEMENT BREAKDOWN There are lots of different ways to break down responsibility. Do you want to elect an education coordinator, crop coordinator, publicity coordinator, and treasurer? Do you want presidents or co-presidents, or simply a voting system that gives everyone in the group equal say?

MANAGEMENT TURNOVER Decide on a reasonable management turn-over time that will give new voices a chance, but also give managers enough time to make some changes.

COMMUNITY VOICES An adult advising committee offers experience that can crucially inform your decisions. Find teachers, dining service managers, local farmers, and community members invested in the idea of a garden and ask for their help.

GARDEN MANAGERS If you can, keep the garden student run. It's empowering to ground the garden in students; have student management, student ideas, and student labor. Hiring a garden manager changes the power dynamic of the group. Still, in the case of some large gardens or gardens growing commercial crops, a garden manager is necessary. This can be great—it's helpful to have a person running the garden whose first priority is the garden. If you do hire a garden manager, make sure to keep student management positions intact; you've got to preserve a strong student voice in the garden.

Organize a work system Design a sign up sheet, a volunteer system, or work days. Ideally, students will drop by and garden consistently enough that a rigid organization of labor won't be necessary. Still, given the many things going on in everyone's lives, assigning work days or chores and divvying up the labor ensures that it will get done. Do you need work-study students or interns? When there isn't an efficient and dependable system, plants don't get watered and the weeds start growing faster than your fingers can yank.

Discuss summer management Who will take care of the garden when school is out? As most students are gone over the summer, most

FACT: Kids in the national School Garden Army, set up during World War I, were organized into companies with a "captain" to lead and two "lieutenants" to assist each troop of up to 150 children gardeners.

Make sure there is some continuity between management teams. Have each management team record their thoughts and decisions so that the new management team can learn from the old one.

Consider hiring a recent graduate of your school who knows about sustainable agriculture. They'll know the school well and have experience dealing with the administration. Otherwise, agriculture teachers or farming specialists are good potential farm managers.

of the labor is gone, too. Interns, from on or off campus, can be very helpful in keeping the garden running over the summer or providing steady and reliable labor. Interns are a good option if your garden is short on funding – most internships are unpaid. Investigate your college's summer housing options. If your garden has unpaid summer interns, offer them housing if you can. Advertise the interning position on your school's website, as well as on agriculture websites or bulletins.

SOIL MANAGEMENT

To grow plants well, you need good soil – it's that simple. Still, many good gardens aren't naturally blessed with healthy soil; gardeners have to work hard to get their soil rich and healthy. Spend time raising your soil quality, as the success of your garden depends on the health of your soil. Good soil supplies plants with nutrients, guards against erosion, retains water better, and guarantees successful growing in the years to come.

Get your soil tested You have to know your soil's problems before you can fix them. Get your soil tested to find its pH, its nutrient levels, and its particle make-up.

pH Most plants thrive in pH levels of 6.0 – 7.0. At this pH, most important nutrients are available to plants. Consult your soil test results to see how you should change your soil.

Macro-nutrients Nutrients in the soil keep plants healthy. If your soil test showed that your soil was deficient in macronutrients, particularly the primary nutrients of nitrogen (N), phosphorous (P), and potassium (K), you'll need to add some fertilizer (preferably manure or compost), plant a cover crop, or use crop rotation to fix nutrients.

Organic content Whether your soil is clay or sand, it benefits from more organic content. The more organic matter in the soil, the better your soil's air and water circulation—and the higher nutrient diversity and organism diversity in your soil. Add compost, manure, or fertilizer mix to your soil to boost its organic content. Also, be careful to keep your tilling to a minimum: over-tilling your soil destroys soil structure.

Contamination and other soil problems Particularly if your garden is in an urban area, check your soil for lead contamination. If your soil is contaminated, contact your state's Department of Environmental Protection – you might have to have your soil removed. If you have serious soil problems like contamination, consider bringing in new soil or building raised or mounded beds. Raised or mounded beds mark off a smaller space for your planting, ensure good soil, and prevent soil contamination. (To learn how to build a raised bed, consult the Planting section.)

Sending your soil to a local extension service ensures the most detailed analysis.

<http://www.csrees.usda.gov/Extension/> Most send-away soil tests cost under \$20, although you have to pay more for more details on your soil's particular nutrient levels.

If your soil is too acidic (pH lower than 7), add lime, limestone, oyster shells, or ash. If your soil is too alkaline (pH higher than 7), increase acidity by adding alum, rock sulfur, cottonseed meal, pine needles, oak leaf mold, or manure.

If you are looking to correct a particular micro-nutrient deficiency, tailor your fertilizer. Phosphate rock adds phosphorus, greensand adds potassium and other minerals. Bloodmeal adds nitrogen.

If you're still not sure your soil is healthy after you've gone through these steps, or if you're just looking for something fun to do on a Saturday night, Colorado State Extension's page on soil improvement has extensive notes on specific organic fertilizers, amendments, and soil management.

<http://www.ext.colostate.edu/ptlk/1618.html>

PLAN YOUR GARDEN

After you've wrangled a space and hopefully a little money, get to know your site. Learning about your site allows you to design and plant a garden that capitalizes on the site's strong points.

Track the sun Spend some time at your site, tracking its exposure to sunlight. Mark off and record what areas receive full sun (at least six hours). Your plot's access to sunlight will determine the crops you can grow. In areas with full sunlight, you can grow most types of vegetables and herbs. In shadier spots, plant leafy greens. If sunlight is a concern, put your garden on the south, southeast, or southwest facing slope to maximize light and heat.

Identify water sources If there isn't a natural water source nearby, decide whether you want to water your plants with hoses, sprinklers, or drip irrigation. Consider collecting rainwater for watering, particularly if there are gutters nearby. Hoses and sprinklers both work fine, but drip irrigation (in which hoses and emitters water plants slowly) makes efficient use of water and can adapt to fit your particular layout. Drip irrigation is expensive and can be a pain to set up—but if you're committed to water conservation, the water efficiency of drip irrigators may be worth the extra trouble.

If your garden is not on an incline, you have to ensure that your soil drains and will not stay soggy. Identify water sources and track where the water flows. If there is not much drainage, the easiest solution is to build a raised or mounded bed. Otherwise, you could bring in drainage tile or create a small irrigation system, but raised or mounded beds generally do the trick. If you're growing in a dry, hot climate, you might consider a sunken bed. Sunken beds retain valuable moisture better than raised or mounded beds.

Select your seeds Seed selection is pretty much up to you; pick plants that you love and have fun growing and eating them. Sometimes local garden centers donate seeds or offer reduced-price seeds at the end of the growing season, so look out for deals.

If you want help selecting your seeds, choose plants that jive with your region, your space, your timetable, and your audience.

PLANTS FOR YOUR REGION Get suggestions from local farmers about which crops are best to grow in your region.

PLANTS FOR YOUR SITE If you have a small garden, plant climbing plants or dwarf varieties. Enter your plot's particular features into this "Plant Finder" (www.garden.org/plantfinder/) and it will suggest the ideal plants for your garden plot.

PLANTS FOR YOUR TIMETABLE If you don't have much time before school ends, pick plants that have short germination rates; beets, broccoli transplants, bush beans, leaf lettuce, radishes, spinaches all take less than 50 days to mature.

PLANTS FOR YOUR AUDIENCE Select your seeds based on what you think your audience would like to eat. Grow crowd-pleasers for a farmers' market, grow caloric crops for a food bank, put in berries if you're hoping to make some good pies and jams. If you need to make money, consider specialty salad mixes or other lucrative crops.

Seed catalogs are helpful and free--and they're great for when you're avoiding your 200 page homework assignment. Order a catalog from Johnny's Selected Seeds (www.johnnyseeds.com) or Gurney's Seeds (http://gurneys.com/catalog_request_qas.asp)

The USDA Hardiness Zone system breaks the US into 11 different "zones" based on the region's average annual minimum temperature. Find your growing zone: http://www.garden.org/zipzone/#zone_info

Design your garden If you're just starting out, start small. Particularly at image-conscious schools, it's better to take good care of a few plants than lose control of a larger plot. If there are students who have studied landscape architecture or design, ask them for advice in space management.

When designing your garden, keep in mind:

BENEFICIAL BORDERS A border, often of flowers, aesthetically frames your garden and brings good insects like ladybugs, lacewings, and predatory bugs. Cornflowers, sweet alyssum, fennel, and golden marguerite are all good choices to line a garden border.

SOCIAL SPACES People should feel at home in the garden. Make stone pathways and reserve a space for chairs or crates to sit.

* wind blocks: If you've got a strong prevailing wind, consider its direction and force—plant tall plants in the direction that the wind comes from, so that the plants act as windbreak.

*sun hogs: Make sure that you don't plant tall plants in front of short plants- you'll leave the short plants in shadow.

*plot rotation See Appendix A for a quick discussion of plot rotation. Make your plots divisible and clearly mark them off— that way, it will be easy to keep track of each plot's harvest and also easy to replace one crop with another.

SUCCESSION PLANTING No matter where you live, you will be able to get multiple harvests (of different crops, even) out of the same bed over the course of your season. In some regions where year-round growing is the norm, this is a given. But even in colder regions of the country, you can get at least two major successions out of your garden by staggering planting of different crops and re-planting beds that have already finished their harvest.

FALL CROPS If you want your garden to be in peak performance when students arrive in the fall, you may want to plant a strong succession of fall crops for example.

GREENHOUSES Growing seedlings in greenhouses and transplanting them out into the garden is a useful strategy if you want to start crops growing before it is warm enough outside. This also works if you need to buy yourself some extra time before space opens up in the garden for the next succession.

SEASON PLAN Making a spreadsheet with your season plan is a great way to stay on top of the logistics of the garden. Be sure to include the seeding date, transplanting date, spacing between plants, days to maturity, and expected harvest date for each plant you're harvesting.

SEASON MAP Alternatively, make a map of the garden depicting crop location. Show how the layout will change as new crops are planted, harvested, and replaced.

Double digging is an extensive gardening technique designed to loosen soil and promote soil productivity. Read more on double digging: <http://www.iirr.org/saem/page134-137.htm>

Building a raised bed is pretty simple. Find out how to build a raised bed: <http://www.garden.org/howtos/index.php?q=show&id=1308>

Try building your own trellises out of saplings, fence posts, bamboo stakes, sticks or string.

If you want more information on your seeds' planting and growing preferences, <http://www.garden.org/plantguide/> offers growing hints for many common crops.

PLANTING

After you've planned your site, ready your site for planting.

Get the ground ready Level the ground and get rid of rocks and weeds. Rocky soil interferes with your hoeing and non-regular hoeing allows weeds to spring up and survive— so it's worth a backache to find the rocks in your garden. Also, particularly if you're planting your garden in an once-grassy area, dig through the soil to find and eliminate grubs, cutworms, and rhizomes that are leftover from the area's old grassy days. When you're getting the soil ready, you might consider double digging. Double digging is particularly helpful for gardens with compact or rocky soils. Double digging is typically done right before planting, so count backwards from planting time and only double-dig when you're about to plant.

Prepare structures Build raised or mounded beds, set up trellises, and put down stones for paths if necessary. This prep work goes faster and is more fun if you get a lot of people working together, so host a community workday. People can build garden structures while they listen to music and drink lemonade.

RAISED AND MOUNDED BEDS Build a raised bed to improve drainage or soil quality. If you're not looking to buy lumber or raise a hammer-pounding sweat, make a mounded bed by mounding your soil (amended with compost if possible) into a shape that serves the space. Plant your plants at the top of the mound to give roots space.

TRELLISES Use trellises to support your taller, climbing plants.

Buy or borrow tools Beg, borrow or buy garden tools and find a good place to store them. You don't need many tools for basic gardening. Start with:

[shovels for digging](#)
[forks for turning soil](#)
[some trowels](#)
[hoes for weeding](#)
[steel garden rakes for leveling soil](#)
[a wheelbarrow or garden cart](#)
[hoses/watering cans](#)

Plant seeds Make sure you are seeding each plant at the right time of year by following growing guidelines for your region or zone. Check which plants should be direct seeded and which should be transplanted. When you're planting, anticipate the size of the plant's root system and plant accordingly. Look up John Jeavons' *How to Grow More Vegetables* – he includes a table that shows how close you can plant your crops without hindering their productivity.

Keep records, take photos

GROWING SEASON AND HARVEST

Although plants are pretty self-sufficient, you're not off the hook once all the seeds are planted. Check up on your plants -- some unexpected problems are bound to crop up and the earlier you identify the problem, the earlier you can address it. Read Appendix A and employ some sustainable agriculture techniques.

Watering your plants A garden's success depends, in part, on how you water it. Be careful not to overwater or underwater your plants. You should be watering down to the plants roots. To test whether you're watering enough, dig a hole next to your plant about the depth of the plants root (being careful not to disturb the roots of surrounding plants) and feel whether the soil at that depth is still moist.

Tailor your watering to your soil type: If your soil is primarily clay, it will retain water better and demand less watering. If your soil is sandier, it will drain water easily and require lots of watering. Fruits and vegetables generally require a lot of water, but different types of plants require lots of water at different times. Check on each plant's water preferences.

Pest, disease, and weed control Weeds and pests trouble all gardeners. Weed faithfully and early by hoeing the soil lightly or pulling them out by their roots by hand-- that way, the weeds won't go to seed and come back the following year. Crop rotation (Appendix A, I) also prevents weeds from coming up.

Attract helpful animals and insects to help get rid of common pests. Scatter bird feeders to attract birds that will eat slugs, snails, wireworms, and some other insects. Planting flowers like candytuft, sunflowers, and marigolds will attract ladybirds and lacewings that help get rid of aphids. If you are having problems with particular weeds, pests, or diseases, look them up on these directories. These directories include pictures, information, and eradication suggestions for each problem.

Weeds: <http://www.garden.org/weedlibrary/>

Pests and diseases: <http://www.garden.org/pestlibrary/>

Pre-harvest planning Begin discussions about where the harvest will go. Depending on the size of your harvest, plenty of options exist:

A HARVEST FEST OR CELEBRATORY DINNER-- offer tours, play music, and get related clubs to help out or set up booths.

USE YOUR FOOD ON CAMPUS Ask your college for permission to set up a small garden-grown produce booth on campus. If your dining service is cooperative, see if you can contribute or sell your food to the dining halls.

GIVE AWAY YOUR PRODUCE Bring your food to local food banks.

SELL YOUR PRODUCE! As you get established, consider a Community Supported Agriculture program (CSA) or a booth at a farmer's market in the coming years.

Harvest! Many crops begin to lose their quality after they have been harvested, so it's best to devise an efficient harvesting and shipping plan before the harvest.

NOTIFICATION Alert those receiving your crop when your crop is a week or two away from harvest. If you are providing the dining hall with

Generally, 1 inch of water soaks down 4-5 inches in clay, 7 inches in loam, and 12 inches in sand.

An estimated 1500 CSAs exist in the US as of 2006.

Vegetables like sweet corn, peas, asparagus, and leafy greens should be kept at 35-40 degrees as soon as they are picked. Root vegetables, corn, eggplant, okra and peppers are more tolerant and can be stored in hotter temperatures.

food, the chefs need time to plan how they will use and incorporate your harvest.

PICKING Some plants respond to harvesting at particular times in the day: vegetables and herbs are best when picked on the morning of a dry, hot day. Don't assume that bigger crops will taste better – research the harvesting times of your crops.

STORAGE Decide how and where the just-harvested crops will be stored. Do you need a refrigerator to keep the crops cool? If you are interested in freezing or drying your harvest, look up the particular preferences of your food; some vegetables don't freeze or dry well.

WEIGH AND RECORD Since seed varieties often change, note the particulars of what you planted and grew this year – don't depend on the seed companies to stay constant.

WASHING AND DRYING

PACKAGING Be careful when packaging and shipping – bruised food decays faster.

Post-harvest Add soil amendments again in the fall and early winter or after your latest succession so that the amendments have time to take effect.

SUSTAINING AND INSTITUTIONALIZING THE GARDEN

The first year, it's not a problem if all you get are green plants and dirty fingernails. But, after the first harvest, take a little time to re-evaluate: what went smoothly and what systems, organizations, or decisions need improvement?

Assessment of existing systems Was your crop yield what you expected? Were you satisfied with the level of community involvement? Does the garden look as good as you would like it to? Were you employing sustainable farming techniques? As you find opportunities to improve the garden, prioritize them – establish which improvements are most vital to the garden's success and address those first.

Community improvement Think about ways to involve more students or include the community outside your college. If you're looking to expand and diversify your student base, co-host events with other clubs or groups. Here are some ways to get the community involved:

SCHOOLS Incorporate programs that bring local schools to the garden.

VOLUNTEERS Hold days open to the community and include tours of the farm.

EVENTS Possibilities include: speakers, dinners, workshops, or films and make open to the community cooking classes with local and garden-grown food.

Academic improvement With a garden established, many schools have pushed for classes, centers, or even a major that address issues of food, agriculture, and sustainability.

CLASSES Could a class (or classes) be established that addresses the topics of agriculture, food, and sustainability? Talk to your environmental department (if you have one) and figure out how to get a course started. Some departments will pay teachers to develop curricula over the summer. Sample existing courses:

Green Mountain College

Michigan State University

Stanford University

Yale University

MAJORS AND CENTERS If your school already has a class or two devoted to agriculture and food, could you establish a major or a center within the college or within an existing department? Sample existing programs:

Colorado State University

Green Mountain College

Iowa State University

Yale University

OTHER WAYS TO BRING AGRICULTURE TO ACADEMICS: Does your school have alternative academic options (like a month-long term) that could offer for a mini-course on agriculture and the garden? Could a garden intern be offered as a school-funded internship?

Show movies like King Corn or Farmer John with garden-grown popcorn to keep your events garden-centric.

UC Santa Cruz has written an instructional resource to help teachers form courses about organic farming. Download it here: <http://casfs.uscs.edu/education/instruction/esa/index.html>

A cold frame is like a miniature greenhouse. It shelters and warms your plants during colder months. You can build one yourself!

Read more:

<http://extension/missouri.edu/xplor/agguides/hort/go6965.htm>

Agricultural improvement Getting things to grow is your first priority. But once you've got things growing, use the garden to explore and experiment. Try diversifying your crops further, expanding to harvest more, or employing alternative agriculture techniques.

PLANT HEIRLOOM SEEDS OR SAVE SEEDS Find heirloom seeds locally to plant in your garden:

<http://www.organicconsumers.org/seeds.htm>

Find plants native to your region, too:

http://www.plantnative.org/national_nursery_dir_main.htm

EXPAND YOUR GROWING SEASON Start growing a few crops in the winter using cold frames or mobile greenhouses.

LIVESTOCK Consider getting livestock or bees in the coming years.

Management and organization improvement Check in with members of the garden community and ask for their thoughts – did they feel underworked/overworked/worked just enough? Now's the time to reshuffle if things aren't running smoothly.

Communications and funding As your garden grows, keep communications active. Don't let all of your helpful contacts and supporters forget about your garden!

RECORD KEEPING Compile and record this year's successes and failures. Discuss ways to improve your record keeping in years to come.

UPDATES Start a website or blog, write a yearly report, or send out email bulletins. Discuss what you've accomplished this year and highlight what you hope to try next year.

GRATITUDE Send thank-you notes and garden-updates to donors or advisors...and include a crisp garden-grown carrot or two. Those who helped you deserve to know how the garden is doing! Send garden grown food or updates to the higher-ups in your college, too; their continued support will help sustain your garden.

JOB OPPORTUNITIES Could intern positions be added? Could summer intern positions be available every summer? If you have a large garden, would a full-time or part-time farm manager help? Discuss whether your volunteer base was sufficient. If not, get a table at the freshman extracurricular fair (if your college holds one). Recruit fresh-faced future farmers!

FUNDING If the school doesn't currently fund the garden expenses, re-apply for grants with reports of your past year's success. If you can show how the garden has become a fixture in the community, the college is more likely to fund it.

Appendix A:

Sustainable Gardening Techniques

Aim for sustainable gardening practices. Sustainable agriculture benefits the land in lots of ways -- it reduces the toxic run-off from fertilizers and pesticides; it reduces fossil fuel use and erosion from conventional tillage; it builds healthy organic matter and strong natural systems. When you are farming sustainably, your land does not weaken from overuse or chemical use. As the writer and farmer Wendell Berry put it, "A sustainable agriculture does not deplete soils or people."

Your garden may not be able to incorporate all of these practices right away, but use sustainable practices when you can. Don't shy away from sustainable agriculture because you are worried that it will be too hard, too expensive, or unproductive. Sustainable agriculture systems imitate natural systems, which are largely self-sufficient and efficient, so they do not demand excess work (only smart planning). You reduce your costs in synthetic fertilizers and you don't spend as much money buying fancy farm machinery. And, despite the common misconception that sustainable and organic farming is less productive, current research shows that sustainable agriculture yields are just as high as conventional yields.

Analyze your situation, read up on different agriculture practices, and decide which practices you can make sustainable in your garden.

Here are some sustainable practices that you should try in your garden:

1. Plot or crop rotation To rotate your crops, establish a 3-4 year cycle --and never plant the same crop in the same plot during that cycle. This rotation establishes a healthy relationship between your crops; you might plant nitrogen-demanding corn in a plot one year, then plant broccoli in that same plot the next year, since corn has taken up much of the nitrogen and broccoli doesn't demand that much nitrogen. Plot or crop rotation creates soil that has a healthy balance of nutrients. Thoughtful crop rotation also helps prevent weeds and pests, because weeds and pests never adapt to one constant crop. Consult one of the Eliot Coleman books for a more in-depth explanation of crop rotation practices.

2. Companion planting and intercropping Like plot rotating, companion planting maximizes the symbiotic relationships between different plants. Simply put, instead of planting each bed with a single crop, you mix vegetable, herb, and flower plants that have mutually beneficial qualities. If you have a small plot, try smaller-scale companion planting, such as planting tomato plants with basil or marigolds (which keep away pests). But if you have a larger farm, try larger scale companion planting (often called intercropping) and undersowing.

Info on companion planting: <http://attra.ncat.org/attra-pub/complant.html>

Info on intercropping: <http://attra.ncat.org/attra-pub/intercrop.html>

3. Cover crops Soil, the most essential element in your garden, has to be healthy if you want healthy plants and healthy harvests. Most essentially, healthy soil must have a lot of organic matter in it. Organic matter reduces erosion, encourages symbiotic relationships with earthworms, and provides other nutrients to the ground. You can boost your soil's

organic matter by growing cover crops and green manures. Cover crops are crops that are generally not harvested for consumption but are used to stabilize the soil. Once grown, the cover crops are tilled into the soil to increase the fresh organic matter. Often cover crops will be seeded in pairs, one being a grass (such as barley or winter wheat) that has deep roots that stabilize and aerate the soil, and the second being a low-growing legume (such as clover or vetch) that fixes nitrogen in the soil and provides a dense mat of vegetation to prevent erosion.

4. Undersowing One additional method is undersowing, in which you can plant a leguminous plant (often dwarf white clover) under your principle crop several weeks after you plant the principle crop. The legume supplies nitrogen for the principle crop while squeezing out other unwanted weeds.

5. Compost Another effective way to naturally boost your soil's quality is through the application of compost or mulch. Compost is a wonderfully efficient way to reuse organic matter around the garden, as well as certain food scraps. Check on your food service provider's current compost system or kitchen scrap disposal to see if you could use these scraps for compost for your garden – or talk to local farmers about their own composting systems. Groundskeeping may be willing to donate grass clippings or brush. A nearby or on-campus riding stable or barn might have manure that you could use, too. Consult compost guides if you're interested in composting on your college campus. Even if you don't want to start a college-wide compost initiative, think about starting a small garden-sized heap that can provide enough compost for your garden. Many worry about the smell of the compost heap, but if you turn the heap frequently you'll eliminate most odors. A heavy, semi-porous lid on the heap also prevents most animals from stealing your "black gold." Think carefully about where to put your compost heap. Ideally, the compost should be in the sun (since sun speeds up the decomposition) and close to a source of water (so that the compost pile can stay moist). But the compost should also be put in a place where it doesn't bother anyone – make sure that it is not an eyesore or a nosesore. If you're worried about the compost heap's appearance (or if your college doesn't want the compost heap visible), consider trench or sheet composting. Trench and sheet composting both put compost under the soil, where it is not visible.

6. Reduced till or no till agriculture Tillage – plowing, turning, or breaking up the soil – is a charged issue. On the one hand, tillage promotes erosion, encourages the use of heavy machinery, and decreases the organic content and water retention of the soil. On the other hand, tillage is a convenient way break up the earth, aerate the soil, and discourage weeds. In an effort to avoid erosion and keep soil healthy, many sustainable farmers advocate for a conservation tillage or no-till agriculture method in which crop residue is left on the soil's surface. If your plot is prone to erosion, your climate is dry, or your soil quality is poor, a reduced till or no till agriculture may be useful. However, since less tillage boosts weed survival, you might have to counter a reduced till technique with undersowing, mulching, or other weed suppression techniques.

Large scale compost guide:
<http://projectcompost.ucdavis.edu/resources.html>

Garden-sized compost: http://www.epa.gov/epaoswer/non-hw/composting/by_compost.htm

Trench and sheet composting:
<http://web.extension.uiuc.edu/homecompost/methods.html#4>

More info on conservation tillage:
<http://attra.ncat.org/attra-pub/organicmatters/conservationtillage.html>

7. Organic fertilizers If your garden soil lacks nutrients but you do not have compost or manure available yet, you may need to supplement your soil with fertilizer. Hopefully, you can reduce fertilizer usage by creating natural systems that boost soil nutrient quality – your leguminous plants will begin fixing nitrogen, your cover crops will add organic content to the soil. In the meantime, consider using organic fertilizers to give your plants a boost and replace lost nutrients. Organic fertilizers do not always pack as much of a punch as conventional fertilizers, instead releasing nutrients slowly over time. But they make up for any delayed release by not burning through micro-fauna and contaminating ground water supplies.

8. Heirloom and native seed varieties Now that farms have turned to monoculture and cash crops, many plant varieties have gotten lost in the shuffle. Since 1900, North America has lost 93% of its food product diversity. Much of this diversity can't be recovered – so it's important to keep growing those heirlooms (unique, non-standard varieties grown pre-1950) that remain. Heirloom plants keep plant diversity high, which in turn reduces plants' vulnerability to diseases and pests. Growing heirloom varieties in your garden also really excites people – it's cool to see speckled green tomatoes instead of red tomatoes and deep maroon lima beans instead of green lima beans. Growing plants native to your region honors and preserves your region's agricultural history.

The following websites can all help you find regional and endangered varieties to grow:

The Renewing America's Food Traditions Alliance (RAFT): <http://www.slowfoodusa.org/raft/index.html>

Native Seeds/SEARCH (aimed at Southwestern agricultural communities): <http://www.nativeseeds.org/v2/default.php>

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

9. Integrated Pest Management Many sustainable gardeners use a system of natural pest controls to keep pests at bay. Integrated Pest Management (IPM) is a method that stresses observation and pest identification—IPM is not just wholesale pest slaughter, but a careful and restrained way to eliminate pests. Read more about IPM at <http://epa.gov/pesticides/factsheets/ipm.htm> or in books like *Brooklyn Botanic Garden's Natural Insect Control: The Ecological Gardener's Guide to Foiling Pests*.

If your soil has a particular deficiency: <http://www.extremelygreen.com/fertilizerguide.cfm>

Learn about alternative soil amendments: <http://attra.ncat.org/attra-pub/altsoilamend.html>

Find local organic fertilizer: <http://attra.ncat.org/attra-pub/orgfert.php>

Appendix B:

Planting Dates and Seasons

Growing good tasting food is pretty important. And if you want good tasting food, you've got to make sure that you plant, transplant, and harvest your food at the right times. Otherwise, if the season gets ahead of you, you may have nothing but bolted broccoli to eat.

1. Make a timeline When sketching out your season, you've got to balance a couple of factors: mark down frost times, times to transplant, maturation times, harvest times, and times to weed and water. Mel Bartholomew's *Square Foot Gardening* has a really helpful chapter on planning when to plant and harvest – it's helpful even if you're growing on a larger plot.

FROST TIMES Mark down that date of your region's last freeze in the spring and first freeze in the fall. Now, if you are one of the few, those lucky few, who has got it mild and frost-free year round, you don't need to worry about this—you can plant crops like beets, broccoli, cabbage, lettuce, peas, and turnips all year long. But otherwise, look up those frost dates. If you are transplanting, look up each plant's transplanting preferences: how many weeks before the last spring frost should you plant the seed indoors? Mark down these dates on a timeline. (The specific number of weeks will vary depending on your crop). Don't forget to do this – some crops, like broccoli, cabbage, and parsley, should be planted indoors almost 12 weeks before the last spring frost – so you'll already be playing catch-up if you don't keep track of their early transplanting schedule. Of course, if you're buying your plants already begun, you don't need to worry.

CROP PREFERENCES Some crops like it cool, some crops like it hot. Mark down the season preferences of your crop on the timeline as well. Again, if your climate is mild and even, you may not have to adhere by these guidelines as strictly.

Here's a general breakdown of produce crops and their seasonal preferences:

Spring: spinach, radishes, peas, beets, carrots, kohlrabi, lettuce, scallions, onions, turnips, parsnips, broccoli, cabbage, cauliflower, brussels sprouts

Summer: cucumbers, melons, squashes, corn, basil, beans, tomatoes, peppers, eggplants, pumpkins

Fall: spinach, radishes, beets, carrots, kohlrabi, turnips, broccoli, cabbage, lettuce, endive

MATURITY RATE Crops take different amounts of time to mature. Mark down the maturation rate of your crops on your timeline.

One month (30 days): spinach, radishes, salad greens, lettuce, kohlrabi

Two months (60-90 days): beets, carrots, corn, scallions, potatoes, endive, peas, bush beans, broccoli, cabbage, cauliflower

Three months (more than 90 days): pole beans, tomatoes, peppers, eggplants, corn onions, garlic, shallots, squashes, parsnips, brussels sprouts, beets, melons, pumpkins, parsley, carrots, potatoes

WEEDING AND WATERING Specify times to weed and water on the timeline. This could be as simple as creating a standard weekly rotation.

HARVEST TIMES Mark down when your crops need to be checked up on or harvested; note whether your crop is continually harvested or harvested only once.

2. Seasons Once again, if you're lucky enough to be in a frost-free region, you don't need to worry about seasons or extending your seasons. But for those growing in more extreme climates, you have to consider your planting schedule. School gardens face the conflict between the natural growing season (summer) and the academic season (not-summer). Here are a few ways to deal with that conflict:

COOL CROPS AND FAST MATURATION: Crops like peas, spinach, radishes, kales, cress, and lettuces, chards, and turnips can be planted once your garden soil is turned (around mid-April, depending on your region). Many of these plants also require fewer days to mature; leaf lettuce, radishes, spinach, and beets all take around or under 50 days to mature. By highlighting cool crops and picking seeds that mature quickly, you can fit in some growing and eating before graduation. Some plants can also grow in the fall before the frost; mustard, summer squash, and swiss chard all have a higher tolerance for cold. Crops like carrots, collards, and kale can even withstand the frost – so there can be plenty of harvesting well into the start of the school year.

SEASON EXTENDERS Cold frames, hotbeds, and row covers are all fairly simple ways to extend your growing season by keeping plants warm. Extending your season does not need to be expensive; Eliot Coleman's *Four Season Harvest* offers suggestions on how to use and even build these devices. In addition, check out the University of Arizona's advice on growing off season at <http://ag.arizona.edu/pubs/garden/mg/vegetable/season/html>.

PREP WORK IN THE OFF-SEASON Devote time to garden-related things: plan for the upcoming season, talk with professors about establishing courses or incorporating the garden into curricula, fundraise to strengthen your resources. Host a dinner for garden volunteers and talk about hopes for the spring. Screen environmental films.

ESTABLISH A COMMUNITY If students get the feeling that the garden is a lonely place in the winter, they won't stop by. Designate specific times for volunteers to come by – send out regular emails and establish regular “work parties” on a weekly or bi-weekly basis. The garden will stay active over the winter if regular community events and work days continue to be scheduled.

Appendix C:

Internet Resources

Farming and Gardening Advice

National Sustainable Agriculture Information Service:

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

Incredibly comprehensive website funded by the USDA that includes many in-depth articles on sustainable farming practices.

Oklahoma State University's Division of Agricultural Sciences and Natural Resources

<http://pods.dasnr.okstate.edu/docushare/dsweb/View/Collection-213>

Click on the different departments on this list to find detailed articles on relevant topics.

New Farm (Rodale Institute):

http://www.rodaleinstitute.org/new_farm

More articles on organic farming techniques.

Farming for Credit Directory (Rodale Institute):

http://www.rodaleinstitute.org/ffc_directory

Lists college farms with their websites, acreage, and academic opportunities.

National Gardening Association:

<http://www.garden.org/home>

Advice and articles on gardening.

Urban Gardening Help:

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

A good general overview of how to garden in the city.

The Center for Urban Agriculture (Fairview Gardens)

<http://www.fairviewgardens.org/index.html>

City Farmer

<http://www.cityfarmer.org/>

Scroll down for good links and how-tos on subjects like vermiculture, organic food gardening, backyard composting.

Community Food Security Coalition

<http://www.foodsecurity.org/index.html>

Farm-Based Education Association

<http://www.farmbasededucation.org/>

“Resources” and “Research” both particularly helpful.

Education and Farm/Gardening

The Student Farm (UC Davis):

<http://studentfarm.ucdavis.edu/>

Particularly thorough regarding compost.

The Center for Agroecology and Sustainable Food Systems (UC Santa Cruz) :

<http://casfs.ucsc.edu/>

Particularly strong in section on “Instructional Resources” (under “Education”).

Dickinson College Student Garden

<http://alpha.dickinson.edu/storg/sisa/index.html>

Click on “New Organic Farm” to find more, “The Dirt” is a great example of an effective newsletter put together about the garden.

Yale Sustainable Food Project

<http://www.yale.edu/sustainablefood/index.html>

Center for Ecoliteracy

<http://www.ecoliteracy.org/index.html>

Aimed at K-12, but great “Publications” and “Resources” sections.

Association for Experiential Education

<http://www.aee.org/customer/pages.php?pageid=28>

Teaching Organic Farming & Gardening: Resources for Instructors (UCSC)

<http://casfs.ucsc.edu/education/instruction/tofg/contents.html>

If you’re looking to incorporate a class on organic farming into your college offerings, here are some sample lectures.

Funding

Proposal Writing Short Course (The Foundation Center):

<http://foundationcenter.org/getstarted/tutorials/shortcourse/index.html>

Good advice for writing effective proposals.

USDA on funding:

<http://www.nal.usda.gov/afsic/pubs/funding.shtml>

More information on funding your work.

Sustainable Agriculture Research and Education

<http://www.sare.org/>

Awards grants to researchers, agriculture educators, and students.

Grants.gov

<http://www07.grants.gov/search/basic.do>

Search to find a pertinent grant among 1,000 grant programs.

The Foundation Center

<http://foundationcenter.org/>

A good place to find funding in their database of grant makers.

Kellogg Foundation: Grant seeking

<http://www.wkkf.org/default.aspx?tabid=63&ItemID=6&NID=41&LanguageID=0>

Gives grants and also includes PDFs on budget writing, etc.

Appendix D:

Garden Books

Things to read to help your plants grow

Baker, Jerry. Fast, Easy Vegetable Garden

Bartholomew, Mel. Square Foot Gardening

Coleman, Eliot. The New Organic Grower's Four-Season Harvest

Henderson, Elizabeth. Sharing the Harvest: A Guide to Community-Supported Agriculture

Jeavons, John. How to Grow More Vegetables

Maynard, Donald N., et al. Knott's Handbook for Vegetable Growers

Ogden, Shepherd. Straight-Ahead Organic

Turner, Carole (ed). Kitchen Gardens: Beyond the Vegetable Patch

Things to read while your plants grow

Douglass, Gordon K (ed). Cultivating Agriculture Literacy: Challenge for the Liberal Arts

Evans, Susan. Feeding the Ten Billion

Fleischman, Paul. Seedfolks

Kingsolver, Barbara. Animal, Vegetable, Miracle: A Year of Food Life

Lawson, Laura J. City Bountiful: Community Gardening in America

McKibben, Bill. Deep Economy

Montgomery, David. Dirt: The Erosion of Civilization

Nabhan, Gary Paul (ed). Savoring and Saving the Continent's Most Endangered Foods: Preserving American Food Traditions

Pollan, Michael. The Omnivore's Dilemma

Pollan, Michael. "Why Bother?" (NYT editorial: 4/20/2008)
http://www.nytimes.com/2008/04/20/magazine/20wwln-ledet.html?pagewanted=1&_r=1

Stickland, Sue. Back Garden Seed Saving: Keeping our Vegetable Heritage Alive

Appendix E:

Sample Proposals

Yale Sustainable Food Project – Yale Farm Proposal
[http://yalestation.org/ycc/files/2002-2003 Council Archive/Reports and Proposals/Yale Organic Farm Proposal.doc](http://yalestation.org/ycc/files/2002-2003_Council_Archive/Reports_and_Proposals/Yale_Organic_Farm_Proposal.doc)

Dickinson College, Dickinson College Farm Proposal
http://www.dickinson.edu/studentsenate/legislation/2006_2007/farm_prop.pdf

Oberlin College, Oberlin Agroforestry Development Plan
[http://www.oberlin.edu/faculty/petersen/ENVS316/LabField/SARE proposal for Jones Farm Forest development 2003.doc](http://www.oberlin.edu/faculty/petersen/ENVS316/LabField/SARE_proposal_for_Jones_Farm_Forest_development_2003.doc)

Smith College Community Garden – Smith College Proposal (scroll down a little to “Smith Community Garden Proposal”)
http://smithgarden.blogspot.com/2008_03_01_archive.html

Bowdoin Organic Garden- Mission Statement (look under sidebar “Topics” for “Operation and Budget”)
http://studorgs.bowdoin.edu/organic/mission_statement.shtml

Warren Wilson College Farm – Mission Statement
http://www.warren-wilson.edu/~farm/article.php?id_article=3

Columbia University – Food Sustainability Project Draft, Mission Statement (Under “Sunday March 2”)
http://gosustainable.blogspot.com/2008_03_02_archive.html

Dartmouth College Farm, Sustainable Living Center Proposal
<http://www.dartmouth.edu/~esd/winter/sustainable.html>

Grinnell College Project for Peach, 2008 Proposal
<http://www.davisprojectsforpeace.org/projects/2008/140pro.pdf>