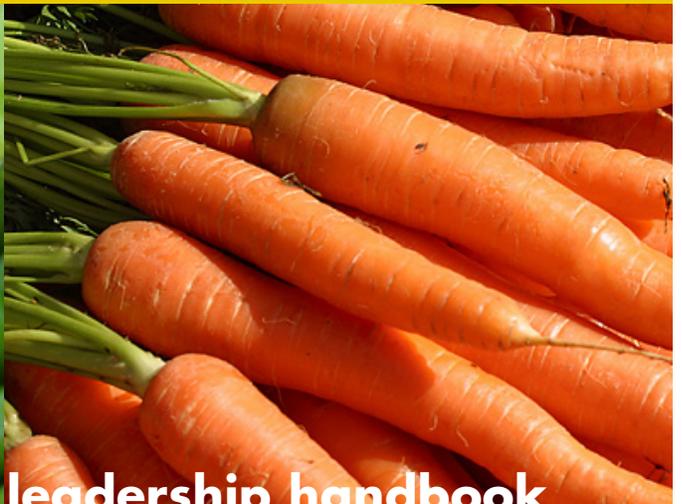
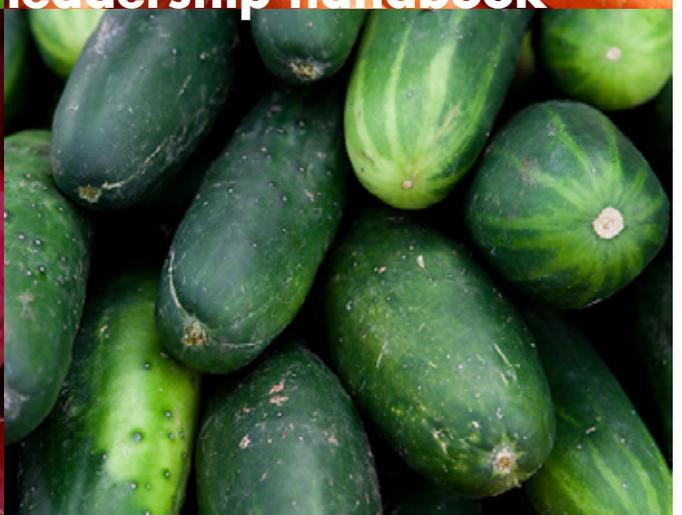




I  MY P-PATCH!



A community garden leadership handbook



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A community garden leadership handbook

Produced by P-Patch Community Gardening Program
Staff and Volunteers

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Com.mu'ni.ty: 1) A body of people having common organization or interests or living in the same place under the same laws. 2) Society at large, the people in general. 3) Joint ownership or participation. 4) The people living in a particular place and linked by common interests

WELCOME TO COMMUNITY GARDENING

Community gardening in Seattle means the P-Patch Program. We are fortunate to have a unique program that functions like few others in the country. Our program has 67 gardens with over 1,900 plots and serves more than 4,000 urban gardeners. About 1,200 more are on waiting lists, especially in high density neighborhoods. The city supports the program by funding staff, while plot fees roughly balance the direct services offered to gardens. We also run on about 15,500 hours a year of donated time from our gardeners and the substantial efforts of the P-Patch Trust.

Community gardens are more than places where individuals rent a piece of ground to

enjoy the many pleasures of gardening; they are resources for the entire community. They are living places nurtured and cared for by all the gardeners who are members. They are generally a well-loved part of a neighborhood and play important roles providing open space, recreation, constructive use of vacant land, a visible connection to the environment, a tool for education and much more. They are also part of the city-wide P-Patch community. They represent our program to the whole City and other neighborhoods, some of which might be considering whether they want a P-Patch. P-Patches are a source of food to the city's food banks through the Lettuce Link program (over 10 tons annually). Community gardening is truly a part of the city's eco-system and connects each gardener to the earth and the human community.

This Manual

This handbook builds on an early manual that was created and distributed by the P-Patch Trust and volunteers. P-Patch Program staff have updated this second manual to contain all of our collective wisdom about P-Patch gardening. We also hope individual sites will also use this manual as a repository for their own activities and their garden's distinctive features. While individual site coordinators may keep a copy for their own use, it is designed for easy updating and we hope that it lives as a useful tool in each garden's tool shed.

We would greatly appreciate the contributions of comments, suggestions, or additions

by gardeners and site coordinators. Please make note of any changes or corrections you would like to see and provide them to P-Patch staff.

The backbone of our large and diverse community gardening spirit is you, the site coordinators. You are the glue which binds the varied elements in your P-Patch. Without your work, community gardening in Seattle would pale. We hope that this manual is helpful as you think of ways to make your P-Patch all that it can be in your neighborhood.

THANK YOU!
P-Patch Program Staff



PART 1: 1973-1983 PICARDO, PASSION BAND PEOPLE: 30 YEARS OF P-PATCHING

By Judy Hucka

Nearly everyone who gardened in Seattle's first P-Patch back in the early '70s remembers the often-repeated advice of Rainie Picardo, whose family lent their farm for the community garden: "You get back what you put in." Picardo was mostly talking about soil, but his words could just as well apply to the program that his land helped make possible.

In the 30 years since the City of Seattle bought the Picardo Farm and started the P-Patch Program (the P stands for Picardo), thousands of gardeners and volunteers have put untold amounts of hours, work and love back into the program that today includes more than 60 gardens, with over 1,900 plots on 12 acres of land.

Though the program considers 1973 as its official birth date, its origins go back to

1970. The famous Boeing Bust was on, and a lot of people were without jobs, money and food. It was also a time of social activism and the beginning to the back-to-the-land movement.

All these factors came together for Darlyn Rundberg Del Boca, a University of Washington student. She decided it was important for children to learn how to grow food, and wanted to encourage them to grow vegetables for Neighbors in Need, a precursor of today's food bank program. She got permission to use a portion of the Picardo family's truck farm in northeast Seattle, and, with the help of City Councilman Bruce Chapman, got the City of Seattle to lease the land for the price of its taxes. She approached officials and students at nearby Wedgewood Elementary School and the children, with the help of their families, planted large plots of beans, broccoli, cabbage, corn and potatoes in the center of the farm. Families that helped out were offered small 8-foot by 8-foot plots around the edges to garden for themselves.

“The idea of community gardening sprouted alongside the vegetables,” wrote longtime program activist

Barbara Donnette in a history published for the program’s 20th anniversary. As she noted, “the concept wasn’t new and wasn’t limited to Seattle. Community gardening was resprouting across the nation from very, very deep roots: village commons, European allotment gardens, extended Asian family gardens and wartime victory gardens.”

Diana Falkenbury was a third-grader at Wedgewood at the time. She and her family were assigned to tend a plot of broccoli, and her mother Marlene, now 77, has been a gardener at the Picardo P-Patch ever since.

There were no water lines in those early years, and gardeners filled up milk jugs and other containers to haul water to their patches. Diana (now Diana Dunnell) remembers that she and her brother took their shoes off on hot days, and came home with black, black feet from the garden’s famously rich soil. “We sure fed a lot of people that first year,” Marlene remembers.

Ross Radley, another of the early Picardo gardeners, also remembers the “magic” soil. “It was a nice place to start because everything you planted did wonderfully. It made even an average gardener like me into an all-star.”

For the next two years, the newly established Puget Consumers Co-op took over management of the community garden,



operating it much the way it is today by dividing the farm into small plots and allowing community members to sign

up. Jack Rucker, who has had his plot at Picardo since those PCC days, remembers that for the first years, plots cost \$3 a year. PCC was interested in community service, and the community garden also fit well with its mission of provide fresh, organic food, said Koko Hammermeister, a PCC employee who was given the job of overseeing the new garden.

In 1973, the City of Seattle, decided to buy the Picardo Farm property, and in 1974, through the efforts of City Councilman John Miller and Mayor Wes Uhlman (who had his own garden plot), the city authorized a community gardening program to promote recreation and open space. The program was adopted by the Department of Human Resources and community gardens were offered throughout the city, united as the P-Patch Program.

The number of gardens grew quickly to 10 in 1974, and to 16 by the end of the decade. Work parties were held at most of the sites to build water systems, tool sheds and other improvements. However, Donnette notes, the gardens were still considered an “interim use” and some were lost to “real development.”

Development wasn’t the only threat. Administratively, the P-Patch Program was housed with the city’s social services. When

a budget crunch hit in the late '70s and early '80s, some city staffers and community members didn't think the gardening program was as important as other social programs that were competing for scarce city funding, said Glenda Cassutt, who managed the program for the city in that period.

Cassutt said two things saved it: the formation of an advisory council (precursor to the Friends of P-Patch) in 1979 to offer community support, lobbying support and some fund raising, and connecting with similar programs across the country for moral support and ideas. "It was still a new idea, just beginning."

There was a great need to spread support for the program beyond gardeners who benefited from it and to show that support to the City Council, said Radley, a lawyer who helped form the P-Patch Advisory Council. (It helped that Radley once broke up the serious deliberations of the council with a thermos of tea and P-Patch zucchini bread, the beginning of a long tradition of mixing passionate public testimony with friendly garden offerings. There's a joke that the council finally agreed to save a spot for a P-Patch when the Interbay golf course was built only if gardening activists promised to stop giving them excess zucchini.)

P-Patch activists like to say the P in the name also stands for "passionate people," and the program has produced more than a few. Jean Unger, who has gardened at Interbay since 1974, says it's the love of the earth and

the camaraderie of many wonderful friends that has kept her at it. Over the years, she's spent nearly as much time fighting to save Interbay as she has gardening—collecting petition signatures, making signs and testifying at countless meetings.

Marlene Falkenbury, who still grows enough beans to can dozens of pints, raises lettuce for a homeless women's shelter, and cares for Picardo's demonstration garden, says gardening keeps her active and healthy. "Gardening is one of those wonderful aspects of life that levels everyone. It doesn't matter what your income is or your status, you're just there to garden"

(Some of the historical information in this article comes from Seattle HistoryLink Web site (www.historylink.org), The Seattle Times and The City Gardener's Cook Book, published by the P-Patch Advisory Council in 1994.)

PART 2: 1983-1993 PROGRAM'S SECOND DECADE A TIME OF REBUILDING

By Gemma D. Alexander

The second decade began in hardship. "1983 was a really tough year," says Barbara Donnette, a founding gardener at Eastlake. "There was a severe economic downturn, and P-Patch funds were limited to plot fees. Services to the gardens, such as

rototilling and fertilizer were cut.” The next year plot fees were dramatically increased, and vacancy rates at the 18 garden sites skyrocketed to 30 percent. The Seattle Times ran an article entitled “Has the P-Patch Program Gone Fallow?” accompanied by an image of a gardener standing in waist-high weeds.

The P-Patch Advisory Council, precursor to Friends of the P-Patch, was not idle during this difficult time. It worked closely with City Council to reinstate funding and services, while obtaining block grant money to add Ferdinand and Angeline P-Patches in Beacon Hill to serve the burgeoning Asian community.

In the mid-'80s, hard work and creativity began to turn things around for the P-Patches. Enterprising gardeners at Picardo placed signs along the road announcing that plots were available, and built a tool shed out of scrap materials donated from a construction site. A donated spade and fork from Smith and Hawkins were raffled off to raise money for communal tools. In 1986, Republican and Judkins gardens were built.

But still a sense that P-Patches were an interim use of public space persisted. Program coordinator Barbara Heitsch and gardeners Nancy Allen and Barbara Donnette worked tirelessly to add new gardens, but several were lost to development and other uses. Without site security, many gardeners suffered from short-timers

disease, and weren't willing to invest a lot in their gardens or commit to their gardening community. Events like the Great Tomato Taste-off were developed as an attempt to draw gardeners together, and Lettuce Link began to coordinate the delivery of P-Patch produce to food banks. The Gardenship Fund was established to help needy gardeners pay their plot fees.

Then, four P-Patches won national community garden awards in 1986 and 1987. In 1987, Seattle hosted the American Community Gardening Association's national conference. About 150 people attended from throughout the country. National recognition gave the program the legitimacy it needed. That year, the land for the award-winning Pinehurst Garden was donated to the P-Patch Advisory Council. With Pinehurst a truly permanent community garden, the P-Patch Program gained credibility as a legitimate land use. The sense that gardens were an interim use began to fade.

The P-Patch Program wrapped up its second decade as the largest municipal community gardening program in the country. By 1993, there were 30 gardens, with 600 people on the waiting list. In honor of P-Patch's 20th

anniversary, the Day of Giving tradition was instituted, and the popular City Gardener's Cook Book was written. From fallow to fruitful, P-Patch's second decade was anything but forgettable.



PART 3: 1993-2003 PROGRAM THRIVES IN THIRD DECADE, BUT CHALLENGES LOOM

By Rich Macdonald

A love affair with community gardening might describe the third decade of P-Patching in Seattle. Starting with 30 gardens and the Program finished with 65. Staff grew from two to five and a half. The Trust owned one P-Patch in 1993 and finished with all or parts of five. At the start of the decade the Trust and the Program joined to address a program need—P-Patches in under-served communities, and by the end, that program, Cultivating Communities, had established 20 community, youth and market gardens serving low income and immigrant communities throughout Seattle.

National trends in greening, community and food systems excited local interest that helped foster community gardening. In Seattle, citywide planning programs saw P-Patches as vital elements in city liveability. An expanding economy helped ensure funding for new P-Patches. Two national conferences firmed Seattle's national reputation as a leader in community gardening and food systems work. The Trust grew and changed, supporting programs to expand community gardening, while continuing to define its mission. Gardens gained self-awareness, developing stronger leadership and sense of themselves as a community. At

the end of the decade, in the middle of a punishing regional recession, and with severe cuts in all levels of city government, P-Patch, gardens prospered and the program continued to expand.

For sheer numbers, the third decade was a time of explosive growth. This growth included the loss of two gardens and redevelopment of almost ten including two re-developments of Interbay! The single biggest gain in gardens owed to Cultivating Communities, a project of the Program, the Trust and the Seattle Housing Authority, which targeted residents of low income housing, mostly in Southeast and West Seattle. Other areas of the city gained as well. The East end which had the fewest gained the most including one P-Patch on Capitol Hill, 1010 Thomas. Other gardens expanded, moved or re-configured, including Burke Gilman Place, University Heights, Alki, Snoqualmie, Ferdinand, Magnuson, Bradner and Interbay. Northeast saw the smallest expansion, but they were both in areas previously un-represented, Fremont and Roosevelt. Northwest added Greenwwood, Haller Lake, Greg's Garden and in the heart of Ballard Thyme Patch. The densely populated west end including downtown added Belltown, Queen Anne, Queen Pea and Cascade. Southeast added Courtland and Hillman City, an area deficient in open space, and Beacon Bluff, our first on Beacon Hill. West Seattle finished with one new garden, Longfellow Creek, but plans for a fourth at Lincoln Park.

Cultivating Communities, the most significant addition to Seattle community gardening in the third decade, seeks to equalize access to community gardening. Often barriers like income, language or life circumstances, hinder a community's ability to start gardens, but the benefits of community gardening, including food security and neighborhood improvement, should be equally available. Cultivating Communities also recognizes that communities have different needs for community gardening. Thus it developed three market gardens as a means for low income and usually immigrant communities to develop ties outside of their community while earning a little extra income. Youth gardens in these immigrant communities similarly instructed youth on nutrition while helping them take part in the community of gardening, to which many of their parents and grandparents belonged. By the end of the third decade Cultivating Communities had 17 gardens, including three market gardens and three youth gardens in the four Seattle Housing Authority sites of New Holly, Rainier Vista, Yesler Terrace and High Point and had begun forays into other low income housing groups, most significantly helping Cambodian gardeners terrace the Mt Baker Hillside garden. A new challenge loomed at the end of the decade to redevelop into mixed housing and income the four SHA communities; that planners worked closely with Cultivating Communities staff to insure that all gardens

lost would be replaced in the new communities was a testimony to their value.

The P-Patch Trust underwent a remarkable rebirth in the third decade, becoming a stronger organization, a better advocate and an able support to P-Patches. At the start it was largely a monthly gardening forum for representatives from each P-Patch. The Advisory Council as it was then called had a significant track record and already owned one P-Patch, Pinehurst, but as the number of gardens grew its size became unwieldy and its role less clear. It turned first into a membership organization, and under the name Friends of P-Patch wrote grants to start Cultivating Communities. Burnishing its advocacy credentials, the Friends promoted a joint City Council and the Mayoral resolution supporting community gardens in 1993, and in 2000 launched a five year plan with the Program, which was also adopted by Ordinance. Importantly, the plan tied staff increases to the development of new gardens. For P-Patches, the Trust adopted the role of fiscal agent, handling money when gardens held fundraisers or wrote grants. The Trust bought liability insurance to cover P-Patches, and it firmly committed itself to plot fee assistance for those unable to pay. In good years, the Trust manages a small grant and tool purchase program. Its 30th anniversary T-shirt, the third by veteran artist Carl Smool, is widely sought. By the end of the decade the "Friends of P-patch" desired to strengthen its land acquisition role, having by this time become the owner or part owner of

four more P-Patches: Fremont, Hillman City, Judkins and Greenwood.

Within the city the third decade of Community gardening coincided with an explosion of planning designed to guide Seattle's growth and give voice to its residents. The ability of gardeners with the help of the Trust to participate at important points in these planning process directly benefited P-Patch. Resolution 20194, pushed by the Trust, called for city support of community gardens including co-location on other City owned property. This resolution gave staff support when negotiating with different city departments. By the end of the decade more than two thirds of P-Patches were under public ownership, which was significant, because this decade also saw the rapid escalation of property values and the loss of two gardens on privately owned property. The City's Comprehensive Plan called for one community garden for each 2000 households in Urban Villages, which is a very useful justification to use with city officials or neighborhood residents and was essential for development of Longfellow Creek, Lincoln Park, Roosevelt, and Thyme Patch all of which are in or near urban villages. P-Patch gardeners turned out for the city's neighborhood planning process. 23 of—plans asked for community gardens. Mention in two plans was critical for funding used to acquire Roosevelt and part of Judkins. Mention in the other plans was a justification for development of most gardens in the later half of

the third decade. Nationally, P-Patch was able to attach itself to a large program to remake public housing. In Hope VI, the four Seattle Housing Authority sites were to razed and reconstructed. Recognizing the importance of the gardens to these communities, the new plans included the gardens. Culminating the decade and embodying many of these trends was the P-Patch and P-Patch Trust Five Year Strategic Plan. Pushed by then president, former city council staff member and part of the influential contingent of Southern Illinois University community gardeners, Frank Kirk, the Five Year Plan adopted by Ordinance by the City Council and Mayor, pushed for development of three to four new gardens each year. It also encouraged hiring one new staff for every eleven gardens developed. P-Patch benefited from two voter passed Parks bond funds which led to acquisition of Queen Anne, Belltown, Queen Pea, Maple Leaf and Linden Orchard. Finally a group of heroic Capitol Hill wannabe gardeners made the case to city council in the late '90s about the deficiency of gardening space in their neighborhood. The City found seven hundred thousand dollars, which funded purchase of a site on Capitol Hill and helped purchase parts of Belltown, Fremont and Greenwood.

A huge boost to the program came with its move into the City's Department of Neighborhoods. Neighborhoods is a department focused on helping neighborhoods be great people places. It is home to the

Neighborhood Matching Fund, a nationally respected small grant program that encourages neighborhoods to use their own resources and receive dollars in return. The community building focus of P-Patch gardens fit neatly into Neighborhoods, which substantially supported programming and increased staff. The matching fund grant not coincidentally has funded development of every new garden, except one, since its start in early 1990s. These start up funds are a huge boost to gardeners who otherwise would be hard pressed to raise the five to ten thousand dollars in hard P-Patch development costs. The matching fund is a substantial factor in the growth of the program.

Nationally, this decade witnessed a national interest in community gardening and greening and heralded a new movement to address food insecurity. Throughout the city a number of disparate organizations worked in the field but had little contact. In 1998, many of these groups came together to host for the second time the American Community Gardening Conference, which brought in more than 400 people, many of them local, to sample the national diversity of the community greening movement. Two years later, many of the same groups gathered again to host the Food Security Conference, which brought representatives from around the nation to hear the story of food production, access and distribution in the Northwest. By the end of the decade, Seattle continued to enjoy its national

reputation as one of the largest municipally supported community gardening programs.

Importantly, the third decade had a number of challenges that ultimately helped strengthen and raise the profile of the program and spur the commitment of gardeners. Much like Pinehurst gardeners in a previous decade organizing along with the Trust to save their P-Patch, in this decade Interbay and Bradner both witnessed fierce fights for their lives. They are inspiring stories that speak to Seattle's growing belief in its community gardens. In the early years, P-Patches were regarded as an "interim use," but gardeners do grow committed to their soil, and when in the early 90s, planners visioned Interbay as a golf course, gardeners were able, based on previous advocacy, to secure a new place at the site. When again in the late 90s, the firm golf course plans emerged that didn't accommodate a P-Patch, gardener advocacy ultimately resulted in a City guarantee and funding for a new and permanent site at Interbay. Bradner is a similar story of persistence and commitment that rises above community gardening. At Bradner, gardeners spearheaded a planning process to turn the entire 3 acre site into a P-Patch/ park/ demonstration garden. Unbeknownst to the community, city officials had housing visions for the site. A huge fight erupted and culminated in a city ballot initiative. Today, Bradner is a splendid community-designed and managed open space with a P-patch, basketball court, children's play

ground, incredible art work and state of the art environmental construction.

Paralleling these other trends in the third decade P-Patch gardeners registered an increased recognition of their responsibility to their P-patch and its place in the community. As the number of gardens increased and staff stayed relatively flat, P-Patches were forced to take on more responsibility. Without firm statistics, there is a general impression that site coordinator management strengthened. The Trust published the first site coordinator manual. P-patches began to develop teams of leaders to handle the many tasks going into running a P-patch. P-Patches began fundraising to buy things they wanted. Sites, encouraged by staff, by the Trust and in such planning tools as the Five Year Plan, began to take the “open to the public” part of their P-patch seriously. Additionally, in the third decade many of the older P-patches were ready for a makeover and the vehicle, as you may guess, was Neighborhood Matching Fund Grant. In this decade 22 gardens wrote NMF grants in amounts ranging from \$2000 to \$15,000. The grants included from master planning and improvements (Picardo), an art fence and compost bins (Belltown), a “Venus” sculpture (Picardo), bamboo trellis (Interbay, Queen Anne), rock garden and community gathering area (Angel Morgan) among many others.

At the close of the decade and looking beyond, challenges, though inevitable can also be a source of growth and strengthening. With the number of gardens continuing

to increase while staff does not, maintaining a consistent level of service and fostering site leadership in fluid gardens will always be a challenge. New phases of open space planning, like the ProParks levy, while a great opportunity, challenges gardeners to sustain interest over the many years of these planning processes. Yet, P-Patch needs keep its interest alive because many areas of the city, downtown, south lake union, Capitol Hill to name just a few, are woefully short of open space, let alone community gardens. Interest in food systems, and access to food and nutrition, particularly with youth, is an area of interest for staff and poses opportunities for youth gardening, market gardening and production P-patches that we’ve only begun to think about. With the strong commitment of our more than 2000 plot holders, the growing resilience of the P-patch Trust and our perennial love of the land and sharing, P-patch can certainly look forward to its fourth decade.

P-PATCH SURVEY—2001 RESULTS

AN ARTICLE WRITTEN FOR THE NOVEMBER 2003 P-PATCH POST

(Background: Every two or three years, P-Patch conducts a survey of its gardeners; this article captures a snapshot of P-Patch gardeners in 2001.)

As many of you have completed your 2004 survey, we thought you might be interested in the results of the last survey,

conducted in 2001. Although the survey can hardly be viewed as complete, given mixed response rates and data entry issues; it does, I think, offer a small insight into the P-Patch community. Among the basic “who’s gardening” questions, 22% are new gardeners, suggesting a yearly turnover of almost one quarter of the program. Another 14% are first year gardeners, and 11% second year gardeners. The figures point out that almost half of P-Patchers have been gardening for two years or less. At the other end, 11% of gardeners have more than 10 years in the program. Our program is pretty evenly divided between renters/ multifamily dwellers and home owners/ single family home dwellers (46% to 53%). Most gardeners (67%) do not have room for vegetable gardening at their home. Gardeners report that 13% live less than one quarter mile from their P-Patch, while another 20% are still within a mile. In an era of transportation concerns, gardeners use a variety of travel modes: 23% bike, 6% bus, 48% drive and 51% walk. The principle mode differs by garden. At Thomas St. Gardens, a small neighborhood P-Patch on Capitol Hill, everyone walks. At the big destination garden Picardo, Farm 75% will use a car, but they also bike (30%), bus (9%), and walk (31%).

Many mixes comprise P-Patch households: 4% are single mothers, while 1% are single fathers, and 23% are couples with children. Single women account for 25% of gardeners, single men total only 9% and couples make

up 29%. Economically, P-Patchers earn a range of incomes. In 2001, 25% of P-Patch households had incomes below the federal poverty guidelines, compared to a 12% figure for Seattle as a whole (1999). 29% of gardeners indicated household incomes greater than \$52,000. Ethnically, gardeners describing themselves as Caucasian constitute 64% of our gardening population, while those choosing an ethnic background of East African, Southeast Asian or Korean make up 20% of our program.

In the garden 10% of gardeners in 2001 reported spending more than 8 hours a week in the P-Patch during the March through October, 25% spent four to eight hours, 48% were in the garden two to four hours and 15% spent less than 2 hours a week at the P-Patch. As to what gardeners produced, a little more than one third grow up to 20% of their weekly produce needs in their garden during the months of April to October; but one quarter harvest more than 60% of their produce needs. During the winter, a hardy 8% of gardeners report bringing in more than 20% of their weekly produce needs. Gardens like to share: of those responding, 20% report sharing every time they go to the garden, while almost 60% report sharing at least once or twice a month. Gardeners are almost as generous with food bank donations: more than 50% donate once or twice a month, while 40% report never donating. Of the few gardeners responding to the question about the

number of gardeners and visitors present, 71% report seeing one to three visitors and gardeners each time they visit the P-Patch. Gardeners like the P-Patch experience. 73% state that if they had to move they would check for a nearby P-Patch and 10% reveal that they would only move near a garden. The P-Patch Post is popular: 45% read it faithfully, another 32% report usually.

P-Patchers have strong beliefs about the value of community gardening in general and P-Patching in particular. Answering the question what is most important about community gardening, 36% placed recreation as number one, 16% most valued the ability of organically grown produce to improve nutrition, and another 16% lined up behind the ability of community gardening to provide neighborhood open space. 10% of gardeners most appreciated community gardening's capacity for providing a place to visit with friends and meet people. Looking to their own motives for gardening in a P-Patch, 29% indicate that growing their own food was most important, 18% valued organically grown produce, closely followed by 17% who garden for solace or therapy. While gardeners may have thought that recreation was an important general benefit of community gardening, only 14% list recreation as their chief reason for gardening. 11% of gardeners value both the sense of community and ability to commune with nature. Answering questions specifically about the benefits of the P-Patch Program,

23% of gardeners prize the ability to connect with nature and the seasons, 20% thought the "all organic" requirement is most valuable, while 19% appreciate that their P-Patch is close to home. 14% of gardeners applaud the equitable nature of plot assignment, while 11% think that P-Patches are good ways to work with others in their neighborhood. P-Patches make the world a better place thought 8% of gardeners, but only 5% prize a quality that distinguishes the P-Patch Program from many in the nation, that our P-Patches are open to the public.

PART 4: 2003- 2008 HALF DECADE OF HAPPENINGS

By Rich Macdonald

This half decade started and ended on unfortunate notes of economic recession—but in between support and interest in community gardening and urban agriculture exploded. New gardens opened in sixteen neighborhoods and work was underway in ten more. These included Roosevelt, Ballard, Westwood, Lincoln Park, Georgetown, the Central area, and Northgate, among others. As usual, gardeners incorporated their personality and interests. Sustainability featured in cobb and straw bale benches and tool sheds at Linden and Maple Leaf; water conservation in cachment systems at Bradner and a composting toilet at Picardo.

Street rights of way (Angel Morgan) and Parks (many sites, thanks to the Pro Parks Levy) and private land easement (Climbing water) were all land upon which P-Patches were built.

P-patch continued to refine its program. Staff worked to address gardener disparities in some communities, establishing the Hawkins garden in the Central area, based in part on outreach to the African American community. Marra Farm P-Patch reached out to more Latino families, helping that garden better reflect its surrounding community. With a mayoral initiative to expand market gardening to low income people, P-Patch grew from a community supported agriculture model to include farm stands in SHA communities and single tract market farming at Marra Farm. A P-patch staff strategic planning process, producing a new tag line, “sustaining grounds for community growing” and refocused on P-Patches as resources for the larger community. This included ending P-Patch programming at one Seattle school and instead encouraging youth involvement in gardens city-wide.

Redevelopment in Seattle Housing Authority (SHA) communities meant changes for the gardens there. Eight SHA sites closed and four gardens opened as New Holly, High Point and Rainier Vista redeveloped. More are scheduled in the future. These changes brought a new mix of residents including middle income folks

and more East African immigrants to the gardens.

City government and elected officials gave whole-hearted support to P-Patch in this half decade. City Council appropriated funding for garden development at High Point, New Holly, and Rainier Beach. They also supported acquisition of the Spring Street site to replace a garden lost in the Central Area. The Mayor and Council worked together with the community and the P-patch Trust to purchase privately owned parts of the Hillman City P-Patch and assist with development funding for Hazel Heights in Fremont. The Neighborhood Matching fund continued to support community led garden development and improvements. City government recognized the importance of the program and the role of staff by adding a new staff position and a second P-Patch van in 2007. In 2008, City support culminated in a \$500,000 appropriation for a P-Patch acquisition and development reserve fund. Although the economic downturn in late 2008 eliminated those funds, voters passed a parks levy that included \$2 million for the acquisition and development of P-patches and community gardens.

The not-for-profit P-Patch Trust too had a busy half decade, advocating strongly for community gardening with the Mayor, Council, and City department heads. They worked to acquire part of Hillman City

P-Patch and became owner of Hazel Heights in Fremont, when an anonymous donor was interested in donating the purchase price of the property.

The enormous popularity of the program reflected a growing national interest in sustainability and food systems. Locally the program waitlist doubled, growing from 800

to more than 1700! As we enter the second half of this decade, P-Patch faces one of its biggest and most envious challenges yet: spending, in two years, 2 million dollars in the voter-approved Parks levy. Interest is huge and spending mostly on development has the potential to double the size of the P-Patch program.



Introduction:
EVERYBODY HAS SOMETHING TO OFFER:
COMPONENTS OF GARDEN LEADERSHIP

The following description of leadership roles is by no means meant to be complete. Seattle P-Patch gardens employ many creative examples of management. Your P-Patch would not function but for the leadership roles assumed by gardeners every year. The degree of leadership varies from site to site. Individuals and/or groups oversee, facilitate, and delegate the tasks necessary to manage a whole P-Patch. The framework suggested below can be done either individually or as a team.

We have broken down garden leadership into three categories:

- Interaction with P-Patch staff
- Essential tasks for garden management
- Special Projects

**• INTERACTION WITH
P-PATCH STAFF**

1. Plot registration, turnover, and orienting new gardeners
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3. Communication and gardener lists
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**1. Plot registration, Turnover
and Orienting New Gardeners**

The P-Patch year essentially starts in late fall or winter when the P-Patch program sends out renewal applications. On average about 75% of all gardeners return each year. Gardeners may keep their plot provided that they maintain it and complete their P-Patch hours. As applications return, program staff compiles gardener information and complete new maps of garden sites, accommodating gardener requests to transfer

site or plots as much as possible. Site leadership has limited involvement with renewal applications, but staff share information and consult as needed on shifting plot assignments. Once renewing gardeners are in, staff begin identifying vacant plots and calling new gardeners from the waitlist. The process continues throughout the winter and spring, with most sites filling by May 1. After that the cycle of plot monitoring begins, when staff and site leadership keep track of who is gardening. Monitoring often results in a rash of plot reassignments in early summer but they continue throughout the growing season. There is often another mini-rush of plot reassignments in fall as staff and site leaders begin hearing about gardeners who do not plan to renew for the next season. The garden year completes in fall with verification that plots have been winterized and a total tally of volunteer hours. The hours tally is an important measure of the incredible community involvement in P-Patches. Gardeners who have not meet the hours and winterization requirements are notified and the annual cycle begins again.

Most newly turned over plots are reassigned by program staff from the waitlist. The waitlist varies; sites in the denser urban areas have waits of several years. Most sites, however, accommodate new gardeners after a short wait or by the start of the following gardening season. Staff recognizes that the waitlist is not a perfect tool for broad neighborhood participation since it can be

a barrier for potential gardeners who may face challenges with the English language or other life circumstances. We encourage sites to think of other ways to draw the neighborhood into the P-Patch and make it a true community space. We encourage participation by groups (seniors, special needs, and children) as a means to reach segments of the populations who might not be able to participate otherwise.

Site leadership responsibility really kicks in with new gardeners. When a new gardener is confirmed, they will be instructed to contact the site coordinator or another designated individual who will set up a convenient time to meet in the garden. The new gardener receives a tour of the P-Patch including their specific plot (boundaries, history, soil condition if known) and communal items and expectations including the shed, tools, common areas, composting systems, yearly volunteer hour sign-in sheets, and other site specific items. Including a short history of the site in this orientation encourages involvement by new gardeners and develops an appreciation of the surrounding neighborhood. The Program staff will have orientated the new gardener on program wide requirements, but it is good to go over them again in person.

Identifying plot turnover is a shared responsibility between staff and site leaders. When a plot becomes available, staff and the site coordinator communicate with each other about the vacancy and condition of the plot. Depending on the previous gardener's stewardship, the

plot may need preparation by an individual or at a work party. A plot that's ready to go meets our program goal to encourage early success and inclusion of new gardeners.

2. Assessing plot activity and enforcement

Naturally, a garden filled with well-tended plots inspires pride in both gardeners and neighbors. A public program like P-Patch, however, necessarily includes a broad range of people whose differing backgrounds, life circumstances, and expectations influence their gardening styles and abilities. As an inclusive program, we try to strike a balance between acceptance of differences and the need for attractive gardens.

Plot monitoring and turnover is often a coordinated activity between Program staff and site leadership. The rules (see *P-Patch Rules* in Resources) spell out the requirements that gardeners must meet to keep their plot. If gardeners fail to “actively garden” throughout the year, staff and site leadership identify the problem and work through a process to remedy the situation or turn over the plot. The process includes notices and cure periods. It is especially helpful when site leadership contacts under-performing gardeners to find out what's happening as a first step. Talk with your P-Patch staff about the best method to assess plot activity in your garden. Note that at some of the larger sites, assistants or block leaders monitor plots, and in that case the “assistant” would

communicate the above information with lead coordinator/s who will then in turn contact the office staff person.

The following is the official process (*though individual variation occurs*) for dealing with unattended gardens. P-Patch staff works with site coordinators throughout this process.

- Step 1: Tour garden to assess gardener activity.
- Step 2: Send ‘Prepare’, ‘Plant’, ‘Weedy’, or ‘Winterize’ communication (postcard, e-mail, or phone call) to gardener who is not tending their plot. The gardener is advised of a one-week deadline for taking action in their garden plot.
- Step 3: Recheck the garden plot after the end of the deadline date.
- Step 4: If the garden is not worked and if the gardener has not communicated their circumstances, then a warning letter for loss of their plot goes out. It indicates that they must garden within one week or lose their plot.
- Step 5: If the garden is not worked within the above two-week time limit, program staff send a drop letter and reassign the plot to another gardener from the wait list.
- Step 6: If a garden becomes neglected three times in one growing season and is sent communication by site leadership or staff in each instance, the gardener can be removed without the above steps on the third offense.

3. Communication and gardener lists

The program and the P-Patch Trust often share information for all gardeners; it is important to assign someone the task of posting mailings and educational opportunities where all can see them. The person should work closely with other gardeners doing leadership activities to spread the word on garden and program-wide happenings. Creating a phone tree of people willing to call everyone at the site is another useful communication tool. Others include: posting flyers on site, post card mailings, and/or e-mail. Please remember: *Not everyone has or uses email, so a combination of these tools is best!* Program staff can help with work party and special event notification as well as generating up to date gardener lists.

4. Required P-Patch community hours

An individual should volunteer to work directly with program staff to monitor and report P-Patch community hours. Hours are counted annually, prior to renewal applications going out in fall. Periodic updates throughout the main part of the growing season are helpful to remind people they have to get in the required p-patch hours.

5. Leadership development, resource availability and technical assistance

For the most part, P-Patch leaders learn on the job. Typically, gardeners become site leaders by taking on more tasks that serve that garden as a whole, as their comfort in

the garden grows. For example, a gardener may start by attending work parties and later help with specific activities like a garden event. As their comfort level grows gardeners might lead work parties or compost sessions, manage a food bank plot or collections, or organize a garden event.

A principle role of site leaders is to recognize and promote gardeners' interest in assuming more responsibility. Delegating responsibility is the chief tool to train new leaders and insure that the tasks are equally shared and garden leadership is inclusive. Many gardeners are content to simply attend work parties, but to equitably share the tasks of community garden management, every gardener should take on some leadership role at some time.

P-Patch staff have no magic guidebooks to instruct garden leaders, but we do have some resources:

- **P-Patch Trust Site Coordinator Meetings:** These periodic meetings are a forum for site leadership to meet and share ideas. Often they are organized around a topic, for example, the Trust's Small Grants or Tool Purchase program or fundraising.

- **P-Patch Application Task Preference List:** This list (see *Task Preference List* in Resources), completed with each renewal application, provides a beginning point for assessing gardener's interests. Program staff can provide a list specific to your garden or do specialized searches. This tool is a starting point for matching the tasks necessary

to run the garden with the gardeners who want to do them. It is best used in consultation with other garden leaders and program staff to consider what's known about the gardener, whether they are suitable for the task, and most importantly, who will ask them to volunteer.

- **P-Patch Program Staff** are a big resource for site leaders. While they do not have magic answers, they do work with many gardens and can help site leaders think through issues. They can also connect gardeners with leaders in other P-Patches, who are often very willing to share their expertise.

- **Collective Expertise of Other P-Patch Leaders:** The P-Patch Program contains a wealth of people who have managed P-Patches or have other very useful experience. Most of them are more than willing to share their expertise. Program staff can help make the connection. In addition, within a specific P-Patch, many former site leaders may still be around and able to assist.

- **P-Patch In-Site Discussion Group:** This resource is an email discussion group specifically for garden leaders. It can be a great place to share ideas and resources and get answers to quick questions or useful tips related to managing a community garden.

6. Good Neighbor Coordinator/s

Periodically people need help with their plots. They may go on vacation, get hurt, have a family emergency, take over a badly neglected plot, etc. A team of gardeners who

have identified they are willing to help out when needed in these special situations is very helpful.

7. Annual Special Events

- **Spring Gardener Gathering:** This pre-season gathering is an important chance in the early spring for each garden to get together and plan for the up-coming year. These “gatherings” take on as many different forms as there are P-Patches; it is up to each garden to work with program staff to create your very own gathering. These meetings should be garden specific and can be an important tool for leadership to set goals and expectations for the coming season. Many gardens use the time to set up a series of dates for work parties throughout the season and get leadership roles filled for the garden. These meetings are also a fun way to welcome newcomers and for gardeners to connect with each other when interest is high at the start of the gardening season. Since not everyone can attend these meetings and some people come into the garden later on in the season your garden should have a way to share decisions and communicate expectations to those gardeners too. The P-Patch Trust and Lettuce Link are potential visitors to these gatherings. When possible, program staff brings seeds to share and are there to help.

- **P-Patch Harvest Banquet:** This fall celebration is the P-Patch Program's annual city-wide party. All staff, gardeners, and their

friends and families are invited to come to share each other's company and a fantastic potluck meal. It's a fun, informal time to connect with people in other gardens and to get a sense of the extent of the P-Patch movement.

8. The P-Patch Trust Site Coordinators Committee

The P-Patch Trust is a non-profit organization that promotes community gardening in the city of Seattle through advocacy, land acquisition, fiscal agency, education, tool provision, small grants for site improvement, and plot fee assistance for low-income gardeners. The **Site Coordinator Committee of the P-Patch Trust** is your venue for educational opportunities, networking between gardens, soliciting ideas, voicing complaints, and a forum to influence policy of both the City Program and the P-Patch Trust. The committee holds periodic meetings that focus on education and networking. This forum gives gardeners a voice in the larger scheme of community gardening in Seattle. Dates and other information will be provided over the year from the chair of the committee. If you have ideas, concerns, questions contact the P-Patch Trust Site Coordinator Committee Chair/s listed in the Resource Section under P-Patch Trust.

9. Theft/Vandalism/Illegal dumping

From time to time gardens are affected by these undesirable events. Sources can be

within or outside of the garden. A few simple practices are the first step to curb these activities. Encourage all gardeners to make these practices the norm in your P-Patch.

THEFT

When you share your produce/flowers: "Pick and give. Don't Invite!" Inviting different people from the neighborhood (kids too) to pick when you aren't there can give rise to several problems. Others may assume free license. People outside the garden often don't understand that next year someone else might be gardening your plot and won't want uninvited picking. Misunderstandings occur about plot boundaries and where picking is OK. And finally, what may be a one time or limited offer from you is sometimes taken as an open invitation.

Keep your plot well harvested. A common excuse given by thieves is "*there sure is a lot of food going to waste here*". A plot un-harvested for a while may need a simple reminder call. If the gardener can't get to it, offer to glean and take the fruit to the nearest food bank. (*Un-harvested produce also can infuriate other gardeners.*)

Get to know your garden neighbors and encourage reporting of illegal activities. P-Patch program staff can help with signs. Encourage gardeners to get to know other gardeners. Consider hiding vegetables in the design of your garden by placing desirable plants in less visible location and use perennials as cover. It helps to plant more

vegetables than you need. These measures should reduce the amount of casual theft.

Some sites may find they have an organized and continuous problem. Collective action may be needed, and the theft or vandalism should be reported to the police. If you observe theft or vandalism in the garden, first call 911. Get a good description of person or vehicle if possible. If the person is caught in the act have police issue a “No Trespass” card when they arrive. Get the incident report number and be sure to post information for other gardeners to see. If you find vandalism and/or theft after the fact you can still report it to the police and get an incident number. Sometimes if you’re having on-going problems it is good to let the police know you’re having problems so they can try and do more visits to the site. See *Safety, Vandalism and Theft in Garden* in the Resource Section for further strategies and contact information.

The following are real-garden examples of dealing with theft.

GARDEN THEFT CAN HAVE CONSEQUENCES *by Bruce Swee-Interbay P-Patch*

It’s early in the day, when nature is at peace with the world. The plants are awaiting their gardener’s hand for grooming and nurturing. Suddenly an unseen hand rips the plant from the earth, its prized features cut out. Hours later, the gardener discovers the loss. The stolen plants have left frustration

and anger, labor wasted, and the gardener feeling violated.

This happens often in the P-Patch community. The standard official recourse is to file a police report, which leads to limited results. It’s easy to lay blame and point fingers, and if this is your solution, you can expect a lot more of the same in the future. Recently Interbay, achieved a more satisfying result.

With information gathered from other gardeners, we determined when the most likely time our thief might show. His features were identified along with his means of transportation. Supplied with binoculars, camera, and cell phone, I positioned my car outside the garden. I waited and waited. When he arrived, I immediately called the police, then sat back and watched the satisfying results unfold. He was caught red handed. I managed to photograph the man, and post his picture in the garden. His photo, initiated countless other incidents involving our gardeners and this individual. The lesson for us was loud and clear, COMMUNICATE. By bringing together assorted information, we discovered we knew far more than we realized. Assist your P-Patch community and report any incident, large or small to leadership.

We found out that it is important if you catch the thief to ask the officer to issue a “trespass card”. Some officers will do so without being asked, while others do not. It is important that this be done so that a record is created on the police computer system.

ILLEGAL DUMPING AND TRASH

Trash at the garden happens. There is no formal trash service at most P-Patches; the only gardens that have small trash pickup are those housed on shared Parks property. If your garden is not in a city park, it is each gardener's responsibility to dispose of their trash. Pack it in, pack it out.

Illegal Dumping does occur at various gardens; in that case notify illegal dumping at # 206-684-7587. You should also notify your staff person. If you have large amounts of debris you can contact Gretchen Muller # 206-684-0570 from Seattle Public Utilities he will periodically help out gardens with free dump passes.

Graffiti is generally the responsibility of the garden. Notifying the graffiti report line # 206-684-7587 is important for tracking occurrences of graffiti. P-Patch staff may be able to help with materials for clean up and can reimburse for costs.

You can find more information about both dumping and graffiti or make reports online is at http://www.seattle.gov/util/Services/Garbage/Reduce_Garbage_&_Litter/

10. Conflict

Occasionally difficulties between people within and outside of the garden arise. You may have difficulty dealing with another gardener. Two gardeners will have trouble with each other and come to you. Of course, people should remember to treat each other respectfully. Anger can lead to difficult situations. If

it is a problem between two gardeners try to get them to work it out between themselves. As with most things P-Patch, listening and common sense often lead to the best solutions. In any instance, if you aren't sure how to deal with a person or situation, don't hesitate to call the program staff for suggestions and/or help in resolving the problem. Conflict usually takes three forms:

- Gardener to Gardener. P-Patches contain a cross section of humanity. Minor disagreements, misperceptions, and irritating behavioral differences are inevitable. When confronted with these situations, encourage gardeners to work it out among themselves, after all they have to live with each other. Encourage them to listen carefully and treat each other respectfully.

- Coordinator to Gardener. Some people just get our goats. In this situation ask another gardener or site coordinator to take over.

- P-Patch Neighbor to P-Patch or a gardener. Most P-Patch neighbors welcome the open space and community activities of a P-Patch. Some have concerns. To name just a few: P-Patches can be noisy during work parties, parking may be an issue, individual gardeners may set off a neighbor or a neighbor's dog may have free reign in a P-Patch. In all cases remain polite. Careful listening will usually suggest a solution, for example, changing a work party time, posting gardener no parking signs or politely making a neighbor aware that their dog is harming

the P-Patch. Neighborhood relations are important and can affect more than just your garden, reflecting on P-Patches city-wide. Please cultivate good neighborhood relationships, and always keep the program staff informed.

Conflict Tip: *Occasionally, P-Patches pick garden mediators for serious issues. Any conflict has at least two sides, and site coordinators may not know where the truth lies or appear to pick sides. If gardeners agree to mediate, then they must accept the solution negotiated by the mediator.*

• ESSENTIAL TASKS FOR GARDEN MANAGEMENT:

1. Internal communication
2. Work parties
3. Compost system
4. Shed and Tool Maintenance
5. Managing the water system and conservation
6. Communal areas
7. Infrastructure maintenance and improvement

1. Internal communication

Good communication is essential in creating a happy community. Gardeners each have their own schedules and are generally not in the garden at the same time as each other. A way to let everyone know about activities and issues at your P-Patch is very important. Gardens have many ways to communicate with their fellow gardeners, they include: annual garden booklets (P-Patch staff can provide samples),

simple email lists, phone trees, postcards (the p-patch program staff can help mail these out for you), posting in the garden, e-mail newsletters, and program-hosted list serves. The best communication comes in many forms so that every person is reached with a method that works for them. We *strongly* recommend that gardens do not rely solely on electronic communication; try a phone tree or a postcard in addition. Whatever you decide, remember to be clear on what the form/s of communication will be.

2. Work parties

Work parties and other events need coordination and leaders. Anyone leading a work party should work with other garden leadership to determine tasks and provide reminders. Four elements make a successful work party: good leadership, clear delineated tasks, multiple forms of notice, and food. *(Food is a reminder to all of us that work parties also serve a social role helping build community in the garden.)*

GOOD LEADERSHIP

At the spring gardener gathering, people can choose a specific work party date to lead. Alternately, site coordinators can recruit work party leaders prior to the spring gathering from the task list, supplied by the P-Patch office. The list identifies those who showed interest in leading work parties on their application form. Some people will naturally take to leadership in the garden so look to those

who have demonstrated leadership abilities at previous work parties. Assigning leaders at the beginning of the year lightens work party leader burnout. Be sure to confirm a week or so prior to the work party.



CLEARLY DESIGNATED TASKS

Common areas of the garden must be maintained by gardeners. These include common flower and food bank beds, orchards, compost areas, and sheds. Work party leaders should send a reminder of the upcoming event to all gardeners and consult other leaders in the garden to identify tasks. A specific project or list of tasks helps gardeners get right to work when they arrive. For gardeners that can not make it to the work party, you may want to post tasks at the site for them to work on a different time

SOME IDEAS FOR A SPRING WORK PARTY INCLUDE:

Re-chipping/saw-dusting the pathways
 Clean up winter accumulation of debris
 Weed common areas and pathways
 Organize tool shed
 Appraise tools (sharpen, clean, and oil)
 Bring compost area into order
 Prune plants that need it
 Check and repair hoses and spigots
 Update bulletin boards and signage
 Fix damage that may have occurred over the winter
 Prep food bank garden beds

SOME IDEAS FOR A FALL WORK PARTY INCLUDE:

Use compost and clean up compost areas
 Clean and organize tool shed/box
 Check, repair, and roll up hoses for storage
 Prune, prepare young trees and other perennials for winter

Plant in common areas

Divide plants and offer to other p-patches

Update bulletin board, etc....

FOOD

Have someone or group of people assigned to bringing snacks and beverages. This is great task for those who are more physically limited. Another way is to advertise a potluck in conjunction with the work party to allow for socializing.

NOTICE

Good attendance requires sufficient notice and phone and/or email reminders prior to date of work parties. Two weeks prior to work party, draft text and send it to your city staff person for a postcard mailing. Someone in the garden should do an email a week to few days prior to date of work party. There should also be people assigned to make a phone call the night before.

COMMUNITY VOLUNTEER HELP

Large groups of volunteers from the larger community can really help get things done.

It is often best to get help with large projects you want to do, new construction, or large weeding projects. When a community group volunteers, you should offer them drinks, maybe lunch, gloves, plenty of tools, and a first-aid kit. You should always send a thank you note after so make sure to get folks to sign in with their contact information! Some sources for volunteers are the United Way, school service learning programs, corporation community service days, garden clubs, faith organizations, girl and boy scout groups, eagles club type groups, etc.

Practice Tip: *If your site has a small team of garden leaders, have at least one of those people attend all or part of each work party. Work parties are a great way to connect with gardeners informally.*

3. Communal Compost System

(See Composting and Soil Building in Organic Gardening 101 manual in Resources for technical information)

Every garden is responsible for processing its own garden ‘wastes’, yet composting is one of the biggest challenges for sites and site coordinators. Given that composting in P-Patches generally relies on a shaky premise that gardeners know what to do and will do it, site leaders shouldn’t get too upset when the results fall short of hopes. Common composting types that happen in p-patches are: cold, hot, combination, and within a plot.

COMMON P-PATCH COMPOST STRATEGIES:

1. Whole Site Work Party. This default strategy relies on periodic work parties to chop up accumulated green material. Between work parties, gardeners pile up organic wastes. The pile, despite the best signage, is usually a mix of chopped and un-chopped material. At the work party gardeners chop through the pile and add it to the compost pile in appropriate proportions. Depending on the level of experience, a well-constructed compost pile will rest neatly in the bin at the end of the work party. There it will stay until the next work party when it is turned, or can be turned between work parties. This method would fall in the combination method, a little hot, a little cold. *The advantage to this is the shared activity; the disadvantage is a longer time to get usable compost.*

2. Compost Teams. Sometimes a P-Patch will organize a group that takes on the compost bins as their ongoing task. These individuals create their own weekly schedule for building and turning compost piles. They will also work with garden leadership to create good signage and may hold compost workshops to make sure everyone knows what the expectations are. It is always good, when doing this hot composting method, to ensure the collection of brown material (fall leaves, coffee chaff, etc) for use in the summer when green materials are abundant while browns are harder to find. *The advantage to doing this method/strategy is fast usable compost for garden plots and*

building community around composting. The disadvantage to this method is that a limited group of individuals are responsible for processing the whole gardens organic “waste”.

3. Composting in plots. Some sites, where organic matter piles up but no composting strategy exists, have closed the collective compost system and adopted a “compost in your own plot” strategy. These sites offer demonstrations of different methods, which include trench composting (in a plot’s internal paths), hole composting, and “Interbay mulch”. (See *Tips for Composting in Your Plot* in Resources). This strategy remarkably cuts down on organic clutter, opens up work parties for more fun tasks, and can insure that some sort of soil building happens in each plot. *The advantage here is that each individual is responsible for processing their own garden waste into compost and the cut and drop method takes less effort. The disadvantage, garden misses out on a team building effort.*

4. Tools/Shed

Your garden will need to maintain and replace communal gardening tools. It is helpful to have a lead on this task to ensure tools are cleaned and sharpened regularly. Having a gardener assigned to maintain order in the tool box/shed helps keep the tool shed safe and helps keep tools properly stored and in good working order. Keeping compost machetes sharp helps lessen gardener fatigue when chopping. If it’s not clear who in the garden can sharpen them, contact the office

to find out if anyone signed up for tool sharpening on their preferred tasks. (See appendix “Helpful Tool Hints”) Safety is the most important element when using any tools in the garden. The program has a tool library with a supply of tools that can be checked out for a large work party when additional tools may be needed. Check with your program staff person on how to check out tools.

5. Managing the Water System and Conservation

It is important to have someone to watch over the water system at each garden site. If no one has signed up to be “water czar”, identify a gardener with some plumbing knowledge at your gardener meetings and encourage them to lend their skills. The program has some water repair kits available, check with your staff person to see what is available. P-Patch staff can also train gardeners on how to maintain your water systems.

Tasks for a water czar include:

- Patrol for water leaks and waste: look for leaks in hoses, connections, and watch for water left running. Fix leaks right away. Call the office for authority to buy or obtain plumbing parts in stock. If there is major leak water should be turned off. If the leak is from the water main call #386-1800
- Turn water off *around November 1*. The water should be turned off; water lines drained at the first sign of frost and then back on again in the spring after the threat of frost is gone.

• Conservation is the most cost-effective approach to water use in our region's dry summers and keeps the costs at a minimum for the program. Every drop counts. Here are some tips:

- **Water in the morning or late afternoon—not in the midday when water will evaporate and be wasted.**
- **Water deeply. It is better to give plantings a good soaking once a week than to give 3–4 light surface waterings.**
- **Water slowly and at the roots. Avoid spraying your plants from the top where water is lost to evaporation. Certain vegetables, such as tomatoes that don't like wet leaves.**
- **Mulch bare soil. A layer of mulch and soil with lots of organic matter retains moisture longer.**
- **Creatively include water collection into the garden. Barrels can easily be attached to the shed roof's drainage system and then be used to water hot composting systems.**

For more information on watering and collecting techniques call the p-patch office and/or the Lawn and Garden Hotline @ 206-633-0224, lawn&gardenhotline@seattletilth.org.

6. Communal Areas

Common areas are resources for your neighborhood and enrich your P-Patch's natural environment. P-Patches host many different communal areas. They can include, but are certainly not limited to, orchard trees, berry bushes, flower beds, native areas complete with ponds, gathering

areas (benches, picnic tables, barbecues, educational libraries, etc.), and herb gardens. Keep low maintenance in mind when designing common spaces. Drought tolerant and/or native species can increase habitat and food for pollinators and beneficial insects. Weed, water, mulch, and prune these areas as a regular part of garden maintenance. Communal gardens often are the garden's outward appearance to the neighborhood; up-keep is important. Work with the whole P-Patch to come up with a plan. Sometimes divided perennials are available from other P-Patches; call the office, and program staff can facilitate.

7. Infrastructure maintenance and improvement

Your P-Patch's infrastructure is very important to the function and look of the garden. Identify someone to plan and work on fundraising for the project and individuals with construction skills. Basic construction skills, or the willingness to learn, are helpful for maintenance of fences, posts, sheds, hose hangers, arbors, and compost bins. Any major construction projects on site should be approved by program staff. There may be considerations you have not thought of, agreements with the landlord, safety and liability issues, expense and funding options, permits and much more. Some basic designs are included in this manual WHERE?, and other resource information is available at the office.

SPECIAL PROJECTS

- 1 Food Bank/Giving Gardens
- 2 |Community Building and Welcoming the Public into P-Patch Community Gardens
- 3 Children's and Demonstration Gardens
- 4 Outreach
- 5 Fundraising

1. Food Bank/Giving Gardens

P-Patches have a long tradition of growing healthy, organic food to share with others. Each year P-Patchers together donate over 10 tons of produce to food banks and meal programs. Gardens are encouraged to make food bank gardening part of their regular activities. The lead volunteer on this task should work with the Lettuce Link Program at Solid Ground and P-Patch staff. Lettuce Link can help with information on food bank locations and hours, in-demand produce, seeds/starts, and lots of helpful advice (206-694-6754 or

<http://www.solid-ground.org/Programs/Nutrition/Lettuce/Pages/default.aspx>). P-Patch staff can provide garden space, seeds, notification and lists of people who have expressed interest in helping with the food bank gardening on their application.

Some ideas for different ways of organizing your giving garden are:

- Dedicated Food Bank “Giving Garden” Bed/s
- Donation drop-off: Some sites coordinate weekly collection from individuals

in the garden and deliver to their local food bank.

- Row for the Hungry: Some gardens (especially those that are small) coordinate to plant rows of within their individual beds. A specific crop is decided upon (like onions), planted, and harvested at the same time for delivery one or two times a year.
- Many gardens have initiated policies and systems for gleaning produce from people's plots if produce is not being harvested. Working with all gardeners to glean unused produce can also be helpful with theft problems because all food is being harvested and used. If someone is going out of town, they can ask a fellow gardener to harvest for the food bank. The “InSite” listserv and site coordinators committee are two good places to learn from other gardens about successful systems.

Tasks for giving gardens include: planting, caretaking/cultivation, harvesting, prepping/cleaning, and delivery of donations to local food bank.

2. Community Building and Welcoming the Public into P-Patch Community Gardens

With all this talk about chores it's easy to lose sight of what gardening in a P-Patch is all about: building community and having fun. Building community

includes inviting neighbors into the P-Patch. There ways to do this using physical features of the garden and with community activities. At the least, visitors should always be welcomed and informed that they should call the office if they want a plot. Program brochures are available that explain the P-Patch Program and P-Patch Trust; ask program staff for some. You can create a space for them in the garden or keep them in the shed, either way, make sure the public knows how to get involved. Many gardens host special events, specifically with the intent to invite neighbors into the garden and to make community connections. Gardeners get the word out in a variety of ways including posting information in the garden, advertising in neighborhood papers and list serves, windshield flyers, and in-person invitations. Some gardens choose to pair these events with fundraisers for their garden. This is just a short list of events that some gardens host to get your own ideas flowing:

- Neighborhood “Night Out” Barbeques or Potlucks—part of the National Night Out events
- Solstice Dessert in the Garden—gardeners each bring a dessert to share with neighbors
- Art in the Garden—artists and musicians share their talents and turn the garden into an outdoor gallery
- Open Garden—like an open house,

- with gardeners hosting their neighbors
- Plant Sales
- U-Pick Lavender Day
- Pony Rides
- Chef in the Garden—cooking demos and tastings
- Garden Fair—just like the county fair, but in the city: produce contests, jams, jellies, etc.
- Kids Day
- Music Night
- Movie Night
- Welcome other Neighborhood Groups to hold meetings, classes, evens in the garden’s common space
- Some gardens have even hosted weddings!

Welcoming the Public into P-Patch Community Gardens with Physical Improvements

by Joyce Moty (Bradner Gardens Park P-Patch)

Seattle P-Patches are often sited on publicly owned land. Occasionally a critic may describe P-Patches as private use of public land. Some non-gardeners are under the impression that they are not allowed to enter a P-Patch to look around. So what can we do as gardeners to make the P-Patches serve both our gardeners and the visitor?

All of the ideas listed below are just starting points. Each P-Patch has its own identity. P-Patches can be magical places that create a feeling of enjoyment and well

being. Materials for some of the ideas may include recycled or found objects. Safety and durability should be a major consideration for furniture and structures.

(Note: For tips on good sources for supplies and materials, see the P-Patch Program's "Organic Gardening Resources and Tips" booklet. The P-Patch office can get you a copy if you don't already have one.)

ENTRANCE SIGNS

- Include a WELCOME (available from the P-Patch office)
- Name of the p-patch
- Additional information: p-patch phone number, ordinance

EDUCATIONAL SIGNS

- Organic gardening techniques
- Salmon-friendly gardening
- Plant identification
- Composting information
- Leaf mold information
- Events calendar

PLANTS IN COMMON AREAS

- Ornamental shrubs and perennials that can look good all year long
- Habitat plants for birds, butterflies, hummingbirds and other beneficial insects: native and non-native

GARDEN STRUCTURES THAT TELEGRAPH THE MESSAGE THAT ONE IS ENTERING A SPECIAL PLACE

- Arbors
- Stepping stones or pavers to indicate a threshold
- Fences and gates
- Banners and flags
- Benches or picnic tables
- Bird houses, bat houses, mason bee houses

- Scare crows
- Guest book
- Brochure box for information on a particular garden, P-Patch Community Gardening Program, and P-Patch Trust.
- Art

The more we participate in the neighborhood the more "good will" we generate and this will create a more protective atmosphere from our neighbors. Being a good neighbor means keeping things clean and well tended around the perimeter of the garden.

3. Children and Demonstration Gardens

P-Patch's are a great place to learn about nature and where our food comes from. Some gardens create plots specifically for children. Others create a common space that is conducive to youth involvement at varying levels. Including signage for passive education or creating a native plant, water, herb, sensory/tranquil, orchard, butterfly or winged wildlife demonstration gardens are ideas to accomplish this. We encourage gardens to be creative. Check out what others P-Patch sites are doing.

ADOPT A PLOT

Gardens can incorporate a designated plot for youth gardening. A local community youth group/school can adopt this plot as their own, being responsible for the caring, maintaining, and harvesting. These plots may need additional community garden

input, assisting with watering and weeding when needed. Communicating with the youth group on the level of support needed is vital for its success and sustainability.

GIVING PLOT

Often the Community Giving Plot is an excellent opportunity to have youth groups directly involved with gardening in a mentorship atmosphere. Giving plot volunteers may need assistance with planning and maintenance. Youth groups can assist this plot on a regular basis or one time experience.

KIDS IN THE GARDEN DAY

Team up interested garden members with community youth groups and plan kids in the garden day. This day can include activities revolving around processes occurring in the garden using Master Gardener Discovery Kits*. Publicize this day in the community with assistance from P-Patch staff.

GARDEN TOURS

Invite nearby schools and Youth Organizations to take full advantage of the garden as an educational tool, beyond simple gardening. Have a designated volunteer be available to offer tours and history of the garden area. This could be followed by inviting the group to use the garden common area to conduct activities, such as worm/insect discovery, garden scavenger hunts, food geography research, or simple measuring math activities.

SERVICE PROJECTS IN COMMUNAL SPACES

P-Patch sites are consistently in need of help with small projects. Throughout seasonal changes common areas can always use assistance with upkeep. High School and Middle School students often have service hour requirements. The P-Patch is a great opportunity for service projects ranging from painting a shed to upkeep and planting in common areas. Let school counselors know about opportunities in the community garden.

Fundraising for the Garden

There are many times that a garden needs to raise money. This can be for a major project such as infrastructure improvements (new plumbing systems, fence, garden beds, sheds, compost bins, etc.), for special projects (art, common area plantings, outreach, celebrations, kids and food bank gardens, etc.), or simply for everyday supplies and tools for the garden. There are three main general ways to raise money and/or supplies for your projects: In-Kind donations, grants and fundraisers.

The **P-Patch Trust** is available to serve as a fiscal agent for all community gardens. Their 501-C-3 status allows those who make a donation to write-off their donation on taxes and can help with eligibility for certain grants. They can also hold money for your garden and for a small fee manage your

*Inquire with P-Patch staff on how to rent these kits free of charge from the University of Washington Extension Program.

money in an account so you do not need to use a gardener's personal account.

Following is a beginning list of potential fundraising ideas. It is designed to give you some examples and sources to get you started as you raise resources and/or money for your garden. This list is far from complete. We encourage you to add to this list and share your experiences as you explore local resources in your own neighborhoods.

GRANTS

- **City of Seattle—Department of Neighborhoods Neighborhood Matching Fund:** The Neighborhood Matching Fund provides money to Seattle neighborhood groups and organizations for a broad array of neighborhood-initiated improvement, organizing or planning projects. A neighborhood group may be established just to undertake a project--the group does not need to be "incorporated." Once a project is approved, the community's contribution of volunteer labor, materials, professional services, or cash will be "matched" by cash from the Neighborhood Matching Fund. There are four different funds within the Neighborhood Matching Fund, each with its own funding parameters and application methods. Four Opportunities: **Large Project Fund** (\$15,000-\$100,000); **Small and Simple Project Fund** (up to \$15,000); **Tree Fund;** **Neighborhood Outreach and Development Funds.** Funds are limited so it's a competitive program. Applications

are considered during specific funding cycles and the highest rated applications are awarded funds. For more information: <http://www.seattle.gov/neighborhoods/nmf/> or 206-684-0464

- **King County Natural Resource Stewardship Network** A clearinghouse for grants for watershed protection, habitat restoration, natural resource stewardship, salmon conservation, and reforestation. It has tips for submitting grant proposals and downloadable pre applications. <http://dnr.metrokc.gov/wlr/pi/grants.htm> or 206-296-8265

- **SNAP (Strong Neighborhood Action Program)** The Washington Insurance Council offers grants for neighborhood improvement and security issues please call them for more information on how to apply and who is eligible. The webpage has more detailed information at http://www.wiconline.org/cm_snap.htm. For more information contact them at 206-624-3330 or caryn.badgett@wa-ic.org

KING COUNTY:

- **WaterWorks, Water and Land Resources Division—The King County Water Quality Block Grant Fund.** Grants up to \$60,000 are available for community projects that protect or improve watersheds, streams, rivers, lakes, wetlands and tidewater. Projects must have a demonstrable positive impact on the waters of King County and must:

- Improve or protect water quality and water dependent habitats; or

—Demonstrate the beneficial use of biosolids or reclaimed water.

There is good information on the website: <http://dnr.metrokc.gov/wlr/PI/grant-exchange/waterworks.htm>.

- **Department of Natural Resources Parks-Urban Reforestation and Habitat Restoration Grant Fund's Wild Places in City Spaces** provides grants up to \$10,000 to volunteer organizations, community groups and government agencies for projects reforesting urban areas and restoring habitat within the Urban Growth Area of King County and incorporated cities. Examples of Fundable Projects

—Removing invasive species and planting native plants in wooded area near another natural area.

—Upland restoration including stewardship training, placement of woody debris, invasive plant removal, and special educational activities.

There is good information on the website: <http://dnr.metrokc.gov/wlr/pi/grant-exchange/wildplaces.htm>

Each of these King County grants has two types: *Small Change for a Big Difference* for up to \$2,500 and *Competitive* for over \$2,500, with corresponding application processes. For more information about any of them contact Ken Prichard at (206) 296-8265 or ken.pritchard@metrokc.gov.

- **Washington Department of Natural Resources-Urban & Community Forestry.**

For more information contact Sarah Griffith at (360)902-1704. http://www.dnr.wa.gov/ResearchScience/Topics/UrbanForestry/Pages/rp_urban_commandurbanforestry.aspx

- **Neighbor to Neighbor Grants.** The Neighbor to Neighbor Fund makes technical assistance and grants up to \$5,000 available to resident initiated projects in South Seattle and White Center neighborhoods. The purpose of the fund is to build stronger communities in those neighborhoods. The fund is particularly interested in supporting organizations that may not have access to traditional sources of funding. Applications are accepted at any time and are reviewed quarterly. Contact Eunice Letzing at (206) 721-8887 or letzing@comcast.net.

- **Bank of America.** Bank of America has a variety of granting programs in their Neighborhood Excellence Initiative that provide funding to non-profit organizations (ie. P-Patch Trust), Find more information here: http://www.bankofamerica.com/foundation/index.cfm?template=fd_neighborexcell

- **Cottonwood Foundation:** <http://www.cottonwoodfdn.org/> The Cottonwood Foundation is only funding established partners through 2011 but they seem worth knowing about. The Cottonwood Foundation is dedicated to promoting empowerment of people, protection of the environment, and respect for cultural diversity. The foundation focuses its funding on committed, grass roots organizations that

rely strongly on volunteer efforts and where foundation support will make a significant difference and meet all four of the following criteria:

- **protect the environment**
- **promote cultural diversity**
- **empower people to meet their basic needs**
- **rely on volunteer efforts**

• **Fiskars-Orange Thumb grants.** Project Orange Thumb is committed to encouraging, sharing, and inspiring creative expression in gardening. Grant recipients receive up to \$1,500 in Fiskars garden tools and up to \$800.00 in gardening-related materials (i.e. green goods). Gardens and/or gardening projects geared toward community involvement, neighborhood beautification, sustainable agriculture and/or horticultural education are eligible. Community garden groups, as well as schools, youth groups, community centers, camps, clubs, treatment facilities are all encouraged to apply. For up to date information <http://projectorangethumb.com/pot/>

• **Stonyfield Yogurt: Profits for the Planet Program.** In addition to funds, they may donate product to organizations. Projects which meet the following criteria will receive the highest priority for funding:

- Protect and restore the planet
- Generate measurable results, i.e. natural resources saved, people educated
- Promote Stonyfield Farm via sampling opportunities, collateral, media relations

Check the website for more information. <http://www.stonyfield.com/AboutUS/ProfitsForThePlanetProgram.cfm>

IN-KIND DONATIONS

In-kind donations from businesses and individuals can be a great way to bring resources to your garden. Local and national businesses are often willing to donate supplies for garden projects and skilled professionals have donated their time and expertise. Working through the **P-Patch Trust** (or another non-profit 501C3 organization) allows you to accept tax-deductible donations. It's a good idea to start locally when soliciting donations (either local businesses or national chains that are based in your neighborhood) as people are generally more apt to be generous to their own community. Donating to your P-Patch can be a great way for businesses to contribute locally, build pride for them, and give them great local publicity. Be sure the businesses know their donation is tax-deductible and let them know you will give them public recognition for their donations such as in a newsletter (P-Patch Trust, local papers, etc.), sign at the garden, etc. Sometimes when they realize that their donation will increase their own visibility, help the community, and get them a tax break they will be much more likely to donate. Here are a few ideas that have been successful for P-Patches in the past:

- **Tool manufactures**—Some gardens have received boxes of various brand-name

tools (hoes, pruners, shears, shovels, etc.) to test and give feedback to manufacturers. Gardens get tools and the manufacturers get help to produce higher quality and more effective tools.

- **Fiskars**—As a part of their Orange Thumb grants, Fiskars will provide grant up to \$1,500 in Fiskars garden tools and up to \$800.00 in gardening-related materials (i.e. green goods). See information in grants section above.

- **Local Landscape Contractor's Association or individual companies**—Construction companies, University greenhouses, nurseries, etc. like to use sharp and shiny tools and don't always repair or mess with older tools. When soliciting donations, remember to stress they are for community use and that you will give them public recognition for their donation.

- **Garden supply stores and nurseries**
- **Hardware Stores**
- **Seattle Street Tree Programs**

—Department of Neighborhoods Tree Fund. A component of the Neighborhood Matching Fund, the Tree Fund provides trees to neighborhood groups to enhance the City's urban forest. The City provides the trees, and neighbors share the work of planting and caring for the trees. <http://www.seattle.gov/neighborhoods/nmf/treefund.htm>, (206) 684-0714.

—Seattle City Light, Arboriculturist, Vegetation Management—Urban Tree

Replacement program. Seattle City Light has a neighborhood tree planting program called the Urban Tree Replacement Program and also sponsors neighborhood plantings. For more information, call (206) 386-1902.

- **Lowes Home Centers** <http://www.lowes.com/lowes/lkn?action=pg&p>AboutLowes/Community>

- **Home Depot** http://corporate.homedepot.com/wps/portal/Corporate_Contributions

FUNDRAISERS

There is always a need for a little money to make the garden run. Community gardens around the city and nation have come up with some fun and creative ways to raise funds. Many gardens hold occasional or annual events to raise money for common elements in their gardens. We list some of those ideas below. Please check with the P-Patch office for individual contact information for further questions about any of these in particular. You will know what works best for your garden group and may develop a new idea. We encourage you to share what you create so we can continue to grow this list and share information with others.

- **Pass the Hat**
- **Bake Sales**
- **Plant Sales: Starts, Perennials, Lavender Cuttings, • Honey, Dahlia Tubers, Etc.**
- **Evanston P-Patch Pie Sale**
- **Interbay P-Patch Salmon Bake**
- **Art in the Garden at Ballard P-Patch—**

A community event where artists sell their works and visitors buy bake sale items and make donations for a variety of art activities

CHEAP BUYS / EXCHANGES

When the time comes to actually make a purchase, it's often worth checking these "cheap" resources first. You might find what you need for less money than you imagined.

- **Estate/Garage Sales and Auctions**—Great places for garden tools. Get there early or call ahead and try to cut a good deal for a package of garden tools.

- **Craig's List**—The "farm+garden", "materials", and "garage sale" listings can all be good places to look <http://seattle.craigslist.org/>

- **King County Materials Exchange**—A good source for free or cheaper building materials <http://your.kingcounty.gov/solid-waste/exchange/index.asp>

- **Freecycle**—Another spot to find free and

useful stuff <http://www.freecycle.org/group/United%20States/Washington/Seattle>

Other Resources and Partners

Seattle Parks Foundation-Park & Green Space development A private, nonprofit organization. They do not offer grants but they can work with communities to improve parks and green spaces by providing technical assistance, fiscal oversight, and/or project management to park projects. The Parks Foundation chooses park projects based on community need for new or improved parks; donor interest; and the degree to which the project enables the Foundation to fulfill its mission to improve and expand Seattle's parks and green spaces and make Seattle a better place to live, work, and play by ensuring that vibrant parks are readily available for all to enjoy. For more information contact them at 332-9900 or www.seattleparksfoundation.org



One of the very best sources for information and tips on organic gardening is the thousands of gardeners that make up the P-Patch community. When a gardening question arises, it's a good bet that someone in your own garden has the answer. The P-Patch list serv is also a great place to pose your gardening puzzles.

In the *Resources* Section, we've included the booklet "Organic Gardening 101" by P-Patcher Ray Schutte. It's an comprehensive introduction to all sorts of best practices for P-Patch plots. The "Organic Gardening

Resources and Tips" booklet compiled by P-Patch staff with has quick tips and suggestions for where to find commonly-needed materials and supplies in the Seattle Area. Ask the office for a copy if you don't already have one. Finally, we highly recommend the excellent *Maritime Northwest Garden Guide*. It is tailored specifically for our micro-climate and has helpful month-by-month instructions. For about fifteen dollars, the guide is available directly through Seattle Tilth year round and at many area garden and bookstores during the growing season.



APPENDICES

1. P-PATCH RULES (2009) / 46

2. TASK PREFERENCE LIST (2009) / 48

3. SAFETY, VANDALISM AND THEFT IN THE GARDEN / 52

4. TIPS FOR COMPOSTING IN YOUR PLOT / 54

5. ORGANIC GARDENING 101 BY RAY SCHUTTE / 55



RULES FOR P-PATCH PARTICIPANTS

Compliance with these rules is important for keeping and renewing your plot.

1) PLOT USE and Path Maintenance

A) USE YOUR PLOT:

- Maintaining your garden is your responsibility. Plots must be weeded and planted within 2 weeks of being assigned a plot. During the garden season everyone must maintain plot all year.
- When you no longer want your plot, you must notify the staff person. You cannot give your plot to others. You can have someone garden with you, BUT you must tell staff.
- During the gardening season staff monitors plot usage. When plots are untended for more than two weeks, gardeners will be contacted by phone, email or postcard and asked to take care of the plot by a certain date. If P-Patch staff or garden leadership contact you about an untended plot two times in one year and your plot becomes untended a third time, staff will reassign the plot without further notice.

B) USE CAUTION WITH TALL PLANTS AND STRUCTURES:

Please be careful that sunflowers, corn or tall trellised plants do not shade your neighbor. You must call the office before building any structure taller than four feet. Trees and permanent structures are not allowed in plots.

C) PATHS ARE IMPORTANT:

Garden pathways need to be kept clear of weeds, obstacles, safe, level and tidy.

D) DO NOT EXPAND YOUR P-PATCH BEYOND ITS DESIGNATED AREA.

Keep invasive, vining and spreading crops confined to your own plot. You are not allowed to work other peoples' plots; if you think a plot is open you must check with staff person.

E) YOU MUST PROCESS THE PLANT MATERIAL YOU REMOVE FROM YOUR PLOT.

You can compost, bury or remove but must not pile up outside your plot.

2) GARDEN ORGANICALLY

(NO pesticides, NO herbicides, NO weedkillers, or NO artificial fertilizers)

The P-Patch Program is for organic gardening only. The use of insecticides made from synthetic chemical materials is strictly prohibited. Slug bait is permitted **only** in enclosed containers, which must be **removed** from the site after use. If you are unsure or have questions, please contact your garden coordinator. You may use organic fertilizers on your plot (like compost, fish meal, or composted steer or chicken manure).

3) P-PATCH COMMUNITY HOURS: EIGHT ARE REQUIRED.

a) Contribute 8 hours for the collective areas of the garden (not inside your plot) each year. Four of those hours must be at your garden. Completing and Recording hours is your responsibility.

b) Hours are due by October 31 every year

4) MISCELLANEOUS

a) Do not take produce from other plots in the garden without permission

b) Smoking is prohibited in the gardens.

c) Loud radios are prohibited.

d) Tires are not allowed

e) The sale of produce is only permitted through the P-Patch Market Garden Program.

f) Water responsibly, treat hoses carefully and return when finished watering. Sprinklers & dripper systems must be attended. Don't water others' plots without permission. Water service is off during the winter.

g) Well-mannered, leashed dogs are allowed within your own plot, unless complaints are received. Please remove scooped poop.

h) Closely supervise your children; help them learn respect for gardening and boundaries. Children using tools in the garden must be under direct and constant supervision of a parent or responsible adult. "Direct" means to be within talking distance.

i) Secure the tool shed and help maintain tools

j) There is no garbage service.

k) Use common courtesy and resolve differences in a neighborly way. For problems with fellow gardeners, stay polite and listen carefully; usually solutions are easily reached. Verbal or physical abuse will not be tolerated. Contact your garden leadership or the P-Patch office for more serious difficulties.

YOU AND YOUR FELLOW GARDENERS ARE CARETAKERS OF THE WHOLE GARDEN SITE.

KEEP THIS SHEET!!! PLEASE USE COMMON COURTESY. KEEP THIS SHEET!!!

PREFERENCE LIST

for tasks, interests and expertise

Of your eight required P-Patch Community Hours, at least four must be completed for your P-Patch. Please use this list to select tasks that reflect your interest, skills professional expertise. All count equally towards your required hours. Choosing tasks now lets us know what you'd like to help with. However, please remember that it is your responsibility to fulfill your hours and do not wait to be called before you volunteer.

Work in Your P-Patch

These garden tasks are the highest priority. They are ongoing needs and count towards your minimum of four Community Hours in your own P-Patch.

LEADERSHIP:

1. Interested in being Site Coordinator or part of site leadership team. Components include: Overseeing maintenance, plot use, composting, food bank donations, work parties
2. Block Leader (Picardo Farm, Interbay and Ballard only)
3. Lead a work party
4. Lead a composting work session
5. Coordinate ornamental and peripheral garden beds

SITE MAINTENANCE—PHYSICAL TASKS

6. Gather organic material for compost (e.g. coffee ground, leaves)
7. Will attend work parties on Weekends; on Weekdays (8) or on Weeknights (9)
10. Work at composting session
11. Weed communal herb and flower beds
12. Prune and care for trees (including fruit trees)
13. Assist with Food Bank Gardening (cultivate food bank beds, adopt abandoned plots, deliver produce to food banks, be a Lettuce Link volunteer)
14. Prepare plots for others
15. Compile Community Hours for gardeners at my P-Patch/ post notices

16. Take noxious weeds home for clean green pickup
17. I have a truck to haul stuff (very important)
18. Start or help with a children's garden

SITE MAINTENANCE—TECHNICAL TASKS

19. Repair gas-powered equipment (e.g. weed whackers, rototillers)
20. Operate gas-powered equipment
21. Repair tools (e.g., sharpen machetes, inflate wheelbarrow tires)
22. Will be the Water Czar for my site. (P-Patch will train. Tasks include: repair hoses/ fix leaky faucets/ irrigation system and turn water on and off)
23. Lend my tools (hand or power--specify on application form)
24. I have construction skills useful for my site (e.g., plumbing, woodworking, design)
25. I am a Master Gardener (WSU Cooperative Extension trained)
26. I am a Master Composter

SITE MAINTENANCE—SOCIAL TASKS

27. Call or email gardeners at my site
28. Photograph site/ gardeners throughout the year
29. Social Butterfly: Organize a potluck or group event for my site.
30. Mentor new gardeners
31. Outreach to my P-Patch neighborhood (helps build waitlist, fill vacancies)
32. I am active in my community or neighborhood council (please specify)

33. Lead a tour at my garden 0 Weekdays
0 Weekends
34. Prepare Newsletter for my site
35. Develop a history scrap book for my site

P-Patch Trust

These jobs help P-Patch Trust and promote and strengthen the P-Patch Program in general.

P-Patch Trust, a non-profit organization, works to acquire, build, preserve and protect community gardens in Seattle's neighborhoods. Through, advocacy, leadership and partnerships, PPT expands access to community gardening across economic, racial, ethnic, ability and gender lines; promotes organic gardening and builds community through gardening.

We seek to break urban isolation by providing opportunities for people to garden together, learn from each other, develop a sense of neighborhood, and create a more livable urban environment.

SITE COORDINATORS

40. Represent my site at quarterly committee meetings
41. Create educational materials
42. Help develop and update site coordinator's handbook

P-PATCH TRUST BOARD

50. Records Management
51. Fiscal Management
52. Non-profit Program Management

FUNDRAISING

61. Develop grant applications
62. Develop Fundraising Campaigns
63. Volunteer for fundraising event(s))

LAND STEWARDSHIP

70. Advocate for community gardens
71. Research new P-Patches and possible acquisitions
72. Grassroots Outreach
73. Help in the design, planning and construction of new sites

FOOD SECURITY

80. Interested in Food Security Issues (often defined as access to safe, affordable and healthy food)
81. Outreach to under-served Communities

RESOURCE

82. Contribute to creation of P-Patch Post (writers, photographers, editors wanted)
83. PPT—Media Relations
84. PPT—Event Marketing
85. PPT—Organizational Development

Occasional Needs

These key tasks are needed on a less frequent basis by the P-Patch Program, P-Patch Trust, and possibly your own site.

SPECIAL EVENTS

90. Event Planning (Harvest Banquet, Flower Show Booth)
91. Caterer/ Chef
92. Set up and/or clean up
93. Bake or cook
94. Make floral arrangements/pick up flowers from my P-Patch

- 95. Perform music or other entertainment (please specify)
- 96. Interested in helping plan a great harvest banquet.

ADMINISTRATIVE SUPPORT TO P-PATCH TRUST AND P-PATCH PROGRAM

- 113. Help at downtown P-Patch office (week-days only): stuff envelopes, office tasks
- 114. Do computer data entry (in office or sometimes at home)
- 115. Work with a team to manage a project which requires a regular time commitment (e.g. managing the P-Patch waiting list, soliciting seeds, organizing photos)
- 116. Provide excel, access/visual basic database programming

GRAPHIC ARTS

- 119. Create illustrations
- 120. Provide desktop publishing
- 121. Powerpoint presentations
- 122. Do newsletter layout (Pagemaker, Mac or PC, please specify)
- 123. Create signs
- 124. Design display materials (booth, posters)

AREAS OF EXPERTISE

The following are areas of expertise that we sometimes need in particular gardens and program-wide. In 2006, P-Patchers gave generously of their expertise in many areas including graphic arts, landscape design, architectural and construction drawings, plumbing, law and real estate.

PROFESSIONAL EXPERTISE

- 130. Accountant
- 131. Administrative Assistant

- 132. Architect
- 133. Artist —(please specify (for example: ceramics, fine art painter, quilt maker, sculptor, graphic artist, illustrator, sign maker
- 141. Auto mechanic
- 142. Bilingual—please specify language
- 153. Building Trade—please specify (for example, able to pour and form concrete, electrician, heavy equipment operator, locksmith, mason, plumber, roofer, welder, and general contractor
- 164. Cartographer
- 165. Construction drawings
- 166. Editor
- 167. Enviro Sciences: please specify (for example, environmental engineer, geologist, hydroengineer, wildlife biologist, soil scientist)
- 173. Event Planner
- 174. Food Preparation-please specify (for example baker, caterer, chef, waiter)
- 179. Fundraising—please specify (for example development specialist, grantwriter, other)
- 183. Horticulture—please specify (for example, arborist, beekeeper, entomologist, horticulture therapist, horticulturist, landscape architect, landscape designer, pesticide specialist, plant pathologist)
- 195. Information Systems—Please specify (for example computer programmer, database programmer, GIS technician, statistician, web designer, web maintenance, other)
- 203. Insurance agent
- 216. Land Use Planner
- 217. Law--please specify
- 225. Librarian
- 226. Marketing
- 227. Medical—please specify (for example, home health care, naturopathic physician, nurse, nutritionist, physical

- | | |
|---|--|
| <p>therapist, physician, psychiatrist, public health specialist, psychologist, social worker, other)</p> <p>239. Photographer</p> <p>240. Project Manager</p> <p>241. Public relations</p> <p>242. Publishing and/or printing</p> <p>243. Real Estate--please specify (for example appraiser, perform environmental assessments, realtor, surveyor)</p> | <p>248. Retail</p> <p>249. Seattle Parks Employee: Please specify job</p> <p>250. Secretary</p> <p>251. Teacher—please specify</p> <p>253. Videographer</p> <p>254. Volunteer manager</p> <p>255. Writer</p> <p>256. Retired: Please specify</p> |
|---|--|

Vandalism, Pilfering and Personal Safety in Your P-Patch Community Garden

P-Patch Community Gardens are public spaces. Our gates are welcoming and as a community garden program, P-Patch encourages local access to each and every one of our gardens. As we invite people to share and enjoy community garden space, we also receive some unwanted behavior. It is important to be aware and prepared. The following is a list of suggestions:

- * **Know the address of your garden.**
- * **Make sure your garden has signage showing it is a p-patch on public land**
- * **Post hours for the garden, decide as a group and let the police know the hours and that if someone is there during “closed” hours it is ok for them to go in and ask them to leave**
- * **Walk through the garden when you arrive to make your presence known.**
- * **Carry your cell phone with you IN the garden.**
- * **Keep your car locked at all times.**
- * **Encourage the neighbors to keep an eye on the garden. Know your garden’s neighbors.**
- * **Invite the community Police to speak formally with your garden community to increase your ability to protect yourselves and to make the police aware of your needs.**
- * **Encourage a higher presence of the Police around the garden. Make the Police aware of incidents that occur in your garden. Call the Seattle Police Department (SPD): Call 911 for in progress emergencies. For NON-emergencies call #625-5011**

You will need to know the correct address of your garden! Theft ordinance #102843

For repeated problems call the Community Police Team officer (remember they are really short staffed, they took many cuts in the last budget cycle)

**West Precinct: 684-8996,
South Precinct: 386-9180,
North Precinct: 684-0878,
East Precinct: 684-4370.**

- * **Organize and make at least 3 calls by different people to the SPD if a theft, vandalism or other emergency event is in progress.**
- * **Create a presence in the garden throughout the day, not just at predictable times of the day.**
- * **Communicate with your fellow gardeners in positive and beneficial ways. Use the information board in the shed to let people know if your bag has been stolen, vegetables pilfered or other undesirable event. Use the information board to let people know when a fun, exciting and good thing has happened.**

- * Invite a buddy to be in the garden with you if your personal comfort level is challenged. Seek buddies within the garden community as well as invite your personal friends to visit with you in the garden.**
- * Interact with strangers in and around the garden in a positive, inviting and friendly manner. Follow your personal instincts in interacting with people if you do not feel safe.**
- * Let the P-Patch office know when any incident has occurred that you are uncomfortable with, or that you have called the police about. P-Patch Community Gardens Program:**

General line/684-0264.

Rich: 386-0088

Sandy 684-0284

Laura 615-1787

Julie 233-7112.

Tips for Composting in Your Plot

4

Interbay Mulch

Interbay Mulch (named after the P-Patch where it was developed) is various organic matter culled from your garden, piled on top of the soil and covered with damp burlap. Covering organic matter with burlap fools nocturnal, light-avoiding organisms into working for you 24 hours a day. The damp burlap also inhibits evaporation, keeping organic materials uniformly moist. Because burlap is permeable it allows oxygen to reach all parts of the mulch.

BASIC HOW-TO

Chop up your garden debris and add “browns” such as leaves, straw, or dried corn stalks. Using compost as part of the mix will jump start the system. Mix your greens, browns and compost starter to a depth of 6 to 18 inches deep. Make sure all materials are damp. Cover with burlap. Continuously check the mulch for moisture—if materials dry out the decomposition comes to a halt.

As your mulch decomposes it will shortly become rich humus full of friendly bacteria, fungi, protozoa, beneficial nematodes, arthropods and worms. When added to your garden it will return the nutrients your crops took out.

Lasagna Method

Composting using this method is a lot like building lasagna.

BASIC HOW-TO

Choose an area in your garden—a path is best. Each time you remove greens, break them up a bit and lay them along the path. Next layer on some “browns.” Alternate layers of greens and browns until all your greens are used up. The materials will break down as you walk on your path.

If your plot is large enough you can dedicate an area for this method, building your layers as the season goes on. Let it winter over and next spring you will have a nutrient-dense soil to plant in!

Dig It!

Assign a few small areas to be wells, digging a deep hole that will be a receptacle for your garden debris. Each time you remove greens, break them up and drop them in the well. Add a layer of compost or “browns” if you wish. When one well is full, start another elsewhere. Next season your wells will be full of rich composted soil and ready to plant!

Fry It!

This is a good method to use for noxious weeds like quack grass. Pull out the weed, shake off the soil, lay it on a stone or in the path of your garden and let it fry in the sun. What was once a nuisance becomes a harmless crumble of ash.

Introduction to **5** Organic Gardening

Compiled by Ray Schutte

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WHAT IS ORGANIC GARDENING

Organic gardening is a process that promotes and enhances biodiversity, natural biological cycles and soil biological activities that restore, maintain and enhance ecological harmony.

Organic gardening basic tenets are feeding the soil through decaying organic matter and utilizing natural cycles and predators for disease and pest control.

PLANNING

Successful organic gardens are not accidental. They are a result of planning, constant care and attention to how things grow. As you plan your garden you have to consider the size of your plot, your commitment and your planting goals. What are your primary interests? Fresh greens, tomatoes, flowering perennials etc. Don't underestimate the work involved in organic gardening.

Once you decide your goals, develop a planting and harvest guide to fit your commitment. For example, do not plant something that will be harvested during that long planned vacation. If you do so you will not see the fruits of your labor and let produce go to waste. Your garden plan will need to include planting distances and depths. It may be helpful to draw your plant out on paper to determine the location of each crop. You will need to work out a succession plan of crops you plan to plant over 3 to 5 years as well as from season to

season. If you plan to garden year round you may want to combine spring and summer into one plan and winter into a second plan for each year. Soil building strategies need to be included in your plan, giving the soil time to prepare for the next crop. Remember the organic gardeners slogan: "Feed the soil not the plant."

Plan your garden thoughtfully and far enough in advance to achieve your goals.

SOIL What is it?

Soil health is synonymous with a healthy and productive organic garden. If you continue to take from the soil and return nothing you will wear your soil out leaving you with nutritionally deprived, weak plants, increased diseases and pests. Commercial compost and manures are sterilized. Sterilization kills organisms that make up the soil food web. They will add organic material to your garden, but will not measurably increase its fertility or health. The use of Peat Moss is discouraged in that it has no nutritional value.

SOIL STRUCTURE

Check your soil's texture. Feel it. Rub some between your thumb and fingers. If the particles are very fine you have clay, if they are very coarse you have sand. How does it hold together: is it crumbly or powdery. Is it sticky or hard? Will it not crumble without a hammer? Does it refuse to hold together at all? Soil structure is how your soil holds air

and water. Soil structure will determine how it warms up and how it cools down.

The simplest way to improve your soils structure is to add organic matter. As it decomposes it will become humus. Humus will improve the way your soil binds together. Humus will keep clay from binding into “bricks” requiring a hammer to break up. Humus will help sandy soils begin to hold together. Working you soil when it is too wet or too dry can adversely affect its structure.

In addition to improving the structure of your soil, organic materials will add important nutrients to your soil and feed the soil food web, which makes nutrients available to your plants. Organic material will help maintain healthy levels of oxygen and water in your soil and make it easier to work.

THE SOIL FOOD WEB¹

INTRODUCTORY CONCEPTS

The soil food web is a cycle of soil organisms that feed on decaying organic matter and in turn feed living organic matter. Plants through photosynthesis use solar energy to fix CO₂ the building block of plant matter. The plants in turn add organic matter to the soil (biomass and plant litter).

The living components of the soil and food web have different compositions for different ecosystems. The biological complexity of the soil food web is involved in nutrient cycling,

formation of soil structure, pest cycles and decomposition rates.

When organisms consume food they create more of their own biomass and release wastes. The most important waste is ammonium (NH₄). Other organisms including plant roots quickly take up ammonium and other readily utilized nutrients. This process is called mineralization.

In addition to mineralization the soil food web can immobilize or retain nitrogen when the demand goes down. Immobilized nitrogen is less mobile and less likely to be lost from the rooting zone. Commercial fertilizers are not immobilized and are easily flushed through the root zone and into the waste stream.

Many soil organisms’ work to improve the structure of the soil. Earthworms and arthropods consume small aggregates of mineral particles and organic matter. They generate larger fecal pellets coated with compounds from the gut. These fecal pellets become a part of the soil structure. Fungal hyphae and root hairs bind together and help stabilize larger aggregates. Improved aggregate stability along with the burrows of earthworms and arthropods increase porosity, water infiltration and water holding capacity.

Complex soil food webs contain numerous organisms that compete with disease causing organisms. These competitors can prevent soil pathogens from establishing

¹ Taken from Soil Biology Primer, published by USDA natural Resources Conservation Service, August 1999. The full primer is available on line at www.statlab.iastate.edu/survey/SQI/primer/index.htm

colonies and generating food. Some competitors feed on pathogens or generate material that is toxic or inhibit pathogens.

An important role of soil is to purify water. Complex food webs include organisms that consume a wide range of pollutants.

There are six major groups of soil organisms: bacteria, fungi, protozoa, nematodes, arthropods and earthworms.

BACTERIA

Bacteria are tiny, one celled organisms. What they lack in size they make up in numbers. A teaspoon of productive soil contains between 100 million and 1 billion bacteria. Bacteria feed other members of the food web, decompose organic matter, help keep nutrients in the rooting zone, enhance soil structure, compete with disease causing organisms and filter and degrade pollutants.

SOIL FUNGI

Fungi are microscopic cells that grow as long threads or strands called hyphae. Hyphae push their way between soil particles, roots and rocks. A single hyphae can span in length from a few cells to many yards. Fungi decompose complex carbon compounds, improve the accumulation of organic matter, retain nutrients and physically bind soil particles into aggregates. Fungi are important food sources for other organisms in the food web, they can improve plant growth with some plants, compete with plant pathogens and decompose certain types of pollutants.

SOIL PROTOZOA

Protozoa are single celled animals that feed primarily on bacteria, but also eat other protozoa, soluble organic matter and sometimes fungi. There are several times larger than bacteria. As they eat bacteria, protozoa release excess nitrogen that can then be used by plants and other members of the food web. Protozoa release nutrients stored in microbial biomass for plant use, increase decomposition rates and soil aggregation by stimulating bacterial activity, prevent some pathogens from establishing on plants and provide prey for larger soil organisms such as nematodes.

SOIL NEMATODES

Nematodes are non-segmented worms about 1/20th of an inch long. A few species are responsible for plant disease, but the majority plays a beneficial role in the soil. Nematodes help regulate the populations of other soil organisms, mineralize nutrients into plant available forms, provide a food source for other soil organisms that influence soil structure and consume disease-causing organisms.

SOIL ARTHROPODS

Many bugs, known as arthropods, make their home in the soil. They get their name from their jointed (arthros) legs (Podos). Arthropods are invertebrates (have no backbone) and rely on an external covering called exoskeleton. Arthropods range in

size from microscopic to several inches in length. They include insects such as spring-tails, beetles, and ants; crustaceans such as sowbugs; arachnids such as spiders and mites; myriapods, such as centipedes and millipedes and scorpions.

Arthropods improve soil structure through burrowing and the creation of fecal pellets, control disease-causing organisms, stimulate microbial activity, enhance decomposition through shredding large plant litter and mixing the soil and regulate healthy soil food web populations.

EARTHWORMS

Most people become familiar with these soft, slimy, invertebrates at an early age. Earthworms are hermaphrodites, meaning they exhibit both male and female characteristics. They are major decomposers of dead and decomposing organic matter. They derive their nutrition from the bacteria and fungi that grow in these materials. They fragment organic material and recycle the nutrients it contains. In terms of biomass and overall activity, earthworms dominate the world of soil invertebrates including arthropods.

Earthworms shred and increase the surface area of organic matter, thus, stimulating microbial decomposition and nutrient release, improve soil stability, porosity and moisture holding capacity by burrowing and aggregating soil, turn soil over, prevent disease and enhance decomposition

by bringing deeper soil to the surface and burying organic matter. Earthworms improve water infiltration by forming deep channels and improving soil aggregation and improve root growth by creating channels lined with nutrients.

Fertilization

N-P-K, nitrogen, phosphorus and potassium are the principle nutrients required by plants. Green growth is encouraged by nitrogen, Phosphorous encourages flower and seed production while potassium helps the plant to use proteins and carbohydrates and build strong stems. Certain crops need more of a particular nutrient for example tomatoes need calcium and garlic requires lots of nitrogen.

These nutrients all can be supplied through compost and decomposing organic material such coffee grounds from your local espresso stand, carrot pulp from the local juice bar, hops and grains from the local brewery, fresh mowed grass, fall leaves, straw and banana peelings; along with the addition of a wide variety of nutrients found in such things as ground oyster clam or mussel shells; crab or shrimp finings, egg shells, granite dusk, glacial till, fish meal, seed meal, ground poultry bones, water that was used to steam or boil vegetables and water used to hard boil eggs.

You may want to start out with a soil test. An inexpensive test is available from the University of Massachusetts that will provide

the basic information you need along with the added bonus of a lead test. The soil tests will provide you with the pH (acidity level) of your soil. A balanced pH of 6.5 to 7.0 is desired. Soil tests will guide you in what nutrients you may need to add to your soil and other amendments that can improve the soil.

You can also find soil food web testing services at Soil Food Web. These are more expensive, but will give you accurate information on your soil's health.

Many gardeners use the organic fertilizer provided by the P-Patch program to provide nutrients. The fertilizer should not be considered an adequate substitute for adding organic materials to your soil. A good soil-building program can provide all the necessary nutrients required by your garden. Fertilizing requirements decline as a healthy food web efficiently stores and cycles nutrients.

FEED THE SOIL NOT THE PLANT

Decomposing organic matter into the soil is the underlying tenant of organic gardening. Microorganisms decompose organic matter and through the process of mineralization makes make nutriment available to plants.

Living soil is successful soil! The benefits of adding organic matter include:

- **Support for the soil food web (microbiological activity or life of the soil)**
- **Contributes major and minor nutrients required for healthy plants**
- **Improved tilth and structure of the soil**

- **Improved water retention. More water soaks into the soil and can be used by crops.**
- **Improved ability to store nutrients**
- **Slow release of nutrients**
- **Assist the mineralization processes (converting insoluble minerals into plant usable forms)**
- **Increase pest and disease resistance**
- **Water quality is protected. Nitrates do not leach into the ground water when soil organism hold nitrogen in the rooting zone**
- **Removes organic materials from the urban waste stream**
- **Reduces pollutants**
- **Strong healthy plants**
- **Flavorful sweet vegetables and beautiful flowers.**

Composting

Gardening raises our consciousness about where our food comes from, and allows us to observe basic life processes in the food chain. Animals, plants, insects, worms, bacteria and arthropods each occupy a unique rung in the ladder of life. Through gardening, and particularly through composting, we can observe their complex interactions in a microcosm, and we can learn how our own actions affect the process.

P-patch garden waste, grass clippings, browned leaves and other organic materials are returned to the earth to nurture and replenish the soil. As these ingredients decompose, we see how life perpetuates itself in the plant realm. The disintegrating plants, leaves and stems supply food for insects, worms and bacteria. As these creatures burrow into the earth, they digest and excrete other forms

of life-supporting materials, and circulate these materials from the surface to lower areas. These underground transformations enable strong new plants to emerge, blossom, produce and, once again, return to the earth.

Compost is the end product of a natural decomposition of organic materials.

MULCHING

Top dressing, side dressing, and sheet composting are some of the terms used to describe mulching. Mulching is using finished compost, grass clippings, leaf mold, leaves, worm casings and other organic materials etc. on top of the soil along side growing plants. Mulches conserves water, inhibits weed growth and feeds the soil food web. Depending on season, mulching is done in many ways for many reasons. Organic mulches can cool the soil in the summer. A heavy side dressing of fresh mowed grass can be used to heat the soil in the spring. Mulches always feed the soil.

Gardeners have been known to avoid mulching in Seattle, because they feel it harbors slugs. The benefits far outweigh the efforts required to control slugs. In addition, a healthy food web produces arthropods that attack slugs and help keep them under control.

Mulching reduces and can even eliminate the need for weed control. Weeds compete for nutrients and can take a lot of time to eliminate over and over again through out the gardening season. Hoeing weeds will results

in crusty soil and exposes more weed seeds to sunlight and air and hence more weeds.

You can not mulch with plastic. It is not a mulch. Plastic does not allow oxygen to reach the soil and will impede if not stop the development of the soil food web. Plastic does nothing for your soil. Some gardeners question if it is even useful to warm the soil.

The more complex the mixture of materials, the more your garden will benefit. Use a good mix of greens and browns. By using a wide variety of materials in your side mulch you will add a wide variety of nutrients to your garden. When you harvest add the tops of your root crops to your mulch. Garden debris is a great source for mulching. Fresh grass clippings will give your plants a nitrogen boost as will coffee grounds from your local espresso cart or coffee shop. Spent hops and grains, seaweed, apple and grape pressings, juice bar pulp etc will enrich your garden mulch and your produce.

It is not recommended that you mulch with manure that has not been composted. Un-composted manures may carry e-coli and other diseases. Avoid using sawdust and wood chips, they will take too long to break down and will steal nitrogen from your plants if worked into the soil too soon.

WEED FREE GARDEN

Mulching reduces and can even eliminate the need for weed control. Weeds compete for nutrients and can take a lot of time to eliminate over and over again through out the

gardening season. Hoeing weeds will result in crusty soil and exposes more weed seeds to sunlight and air and hence more weeds.

A good over wintering soil building program using an Interbay Mulch or Green Manure and a heavy top dressing/side dressing mulch can eliminate weeds in your garden. Fertile soil will help crops grow vigorously and healthy. A deep side mulch of 2-3 inches will keep the sun from reaching the seeds at the soil level and hence they can't germinate. In addition the mulch will break down and feed your crops.

Some gardeners shy away from using fresh grass clippings for fear of seeds starting grass in their garden. If you get grass starting it means your mulch is not deep enough. Apply more mulch and add a greater variety of materials. If a weed comes up in your garden add it to the mulch.

HOT COMPOSTING

“Hot piles” make efficient use of compost bins and are the quickest way to garden-ready compost. Like baking a cake, the process is easier than it looks once you do it. The growth of high temperature microorganisms is achieved by balancing food, water and air in the compost pile to favor their growth. A hot compost pile can heat rapidly to 120 to 160 degrees Fahrenheit, killing off weed seeds and disease organisms and neutralize pesticide residues. Once the hot phase is completed, lower temperature creatures such as worms, insects and other

decomposition organisms complete the decomposition process.

Basic Principles

AIR

The microbes make your compost need air to live and work to make compost. Compost piles should allow for plenty of air. This is usually accomplished by using some kind of “bulky” ingredients such as straw or old weeds. When the pile settles under its own weight and excludes air, it needs to be “turned” to get more air into the pile.

MOISTURE

Composting microbes need moisture to live (just like we would die without water). Ideally, the pile should be “as wet as a wrung-out sponge.” At this ideal moisture level, the ingredients are full of water, but there is still air getting into the pile. And, the microscopic film of water on the surface of each particle in the pile is an ideal medium through which the microbes can spread as they do their work.

A pile that is too wet will collapse under its own weight, excluding air and becoming anaerobic and smelling like rotten eggs. A pile that is too dry cannot support a healthy population of microbes, and so the rate of decomposition will be drastically slowed.

FOOD (MATERIALS)

You will need a combination of brown and green materials. Green materials provide

nitrogen, which is a critical element in amino acids and proteins, and can be thought of as a protein source for the billions of multiplying microbes. Browns provide carbon, which is mostly made of long chains of sugar molecules linked together. Browns are a source of energy for the compost microbes. A good mix of browns and greens is the best nutritional balance for the microbes

Brown materials are dry, porous materials that help aerate the compost pile. They can be such things as leaves, dried grass, hay, wheat straw and dried corn stalks. Browns do not decay quickly on their own. “Green materials” provide the nitrogen and high-energy carbon compounds needed for fast microbial growth. They include grass clippings, fresh dairy, rabbit or chicken manure, fruit and vegetable waste and garden trimmings.

The ideal carbon to nitrogen ratio (C:N) is 30:1. This is most often achieved through a 50-50 mix of materials by volume. High carbon browns take more time to break down and require more greens by volume. A list of materials has been provided.

PROCESS

1. If you want to build a hot pile, you'll need to have a cubic yard (3' by 3' by 3') or more of chopped material to build the pile with all at once. Collect as many browns and greens as you can to start your compost pile. Larger piles tend to hold moisture better and decompose faster. You'll also need to make sure that you have a good ingredient mix, proper moisture and air. It is recommended that you always keep one bin free to turn compost into when doing hot compost
2. Chop materials into a mix of sizes and shapes to increase the surface area and provide for areas to store air. (Leaves and grass clippings provide an ideal mix of sizes)
3. Pay attention to the C:N Ratio. Usually a 50 – 50 mix of green and brown materials by volume will be satisfactory
4. Spay with water and mix the materials (rather than layering them) outside of the bin, will trap air and help to make the pile evenly wet. The mix should be as “wet as a wrung out sponge.” Too much moisture will make the particles heavy and as they sink from their own weight they will displace the trapped air.
5. Cover the compost with burlap (If available).
6. The pile should be covered to protect from rain. Rain will move into the compost pile and displace the air trapped between particles creating anaerobic conditions.
7. Compost should reach 120 to 160 degrees by day 2 or 3.
8. **Turn and “fluff”** compost with a pitchfork at least once a week (every three days is best) Fork the sides to the middle and the middle to the sides. Fluff the compost by tossing it into the air. Turing and fluffing will help keep the pile composting at an even rate. Turning redistributes materials

and fluffing adds air, which is required to keep the thermopile (“heat-loving”) bacteria working. Keeping a bin open to turn hot compost into will save time and energy. Otherwise you have to handle the compost twice, once taking it out of the bin and again putting it back in.

9. A full bin will often become a half bin after settling. You can Combine two half bins to free up a bin and start a second pile.
10. When compost fails to heat up after turning (3-6 weeks), it can be used immediately as

unfinished mulch or stored in the green and black bins or other “curing” area where worms, arthropods and fungi continue the breakdown process. Protect from rain to prevent nutrient leaching. The longer compost “cures” the more available nutrients are to plants.

11. Screen compost before use if using in soil with seedlings or young plants if it has not fully broken down. Microbes breaking down un-decomposed organic matter use nitrogen needed by growing plants.

Troubleshooting

Odors? Turn and add brown materials.

Dry pile? Add water, greens and mix.

Compost Recipes

CARBON/NITROGEN RATIO KEY

N = Nitrogen

NN = More Nitrogen

NNN = Lots of Nitrogen

C = Carbon

CC = More Carbon

CCC = Lots of Carbon

RECIPE # 1

3 parts	Dry leaves	CC	Brown
1 part	Fresh garden weeds	N	Green
1 part	Fresh grass clippings	NN	Green
1 part	Food Scraps	NN	Green

RECIPE # 2

6 parts	Dry leaves	CC	Brown
3part	Fresh grass clippings	NN	Green
3part	Food Scraps	NN	Green

RECIPE # 3

3 parts	Dry leaves	CC	Brown
3part	Fresh grass clippings	NN	Green

RECIPE # 4

3 parts	Dry leaves	CC	Brown
3part	Fresh grass clippings	NN	Green

Power Boosts

The following materials will add nutrients to your pile. “Power Boosts” are not required but can benefit the process. Mix “power boost” material with the other ingredients so they are spread through out the pile. Quantities are maximum amounts recommended.

Garden soil	½ shovel full	High in micro-organisms
Compost	½ shovel full	Very high in micro-organisms
Granite Dust²	shovel full	Rich in minerals
Ground Oyster Shell	shovel full	Rich in minerals
Wood Ashes³	½ shovel full	High in potash and carbon

COLD COMPOSTING

There are many advantages of hot compost piles, but there are advantages of cold piles as well. Hot piles decompose more quickly, and kill most weed seeds and other diseases. Cold piles, on the other hand are convenient for individual gardeners to use in their plots. It is also a method for people who do not have the time to tend hot compost piles. Cold composting is an 'add ingredients as you get them approach. Cold compost piles have to sit a year or so for microorganisms,

worms and other decomposers to complete the decomposition process.

Basic Principles

The same basic principles of air, moisture and materials that apply to hot compost apply to cold composting. The difference is that the C/N mixture is built over time as the ingredients become available hence the pile does not heat up.

Slow composting does not produce the heat needed to kill many weed seeds. It is

² Most monument makers will provide for free

³ Wood ashes are highly alkaline and if used in excess may upset the soil ph balance. Wood ash is often recommended to help cure club root.

best to pull and compost weeds before they go to seed. If you put seeds in the compost pile, be prepared for more weeding. (Heavy mulching can prevent weeds. See weed free gardening section for instructions)

Process

METHOD ONE

1. Accumulate enough autumn leaves to fill $\frac{3}{4}$ of a bin
2. Moisten while mixing them to the consistency of a wrung-out sponge. Mixing will also help break up any leaf clumps.
3. Chop fresh green garden wastes into mixed sizes and stir in during the garden season.
4. Add kitchen wastes and vegetable scraps from the garden (greens) by opening the pile and placing wastes into the center and then covering them. This helps aerate the pile, and also buries the fresh wastes so they do not attract pests.⁴
5. Turn the pile. It will get turned some when you add materials, but will benefit from additional turnings and if necessary rewetting. (Keeping one bin free will facilitate turning)

METHOD TWO

1. Accumulate garden waste enough garden waste to fill $\frac{3}{4}$ a bin when chopped and allow it to dry out

2. Chop dried garden waste (brown)
3. Moisten brown mix while mixing them to a consistency of a wrung out sponge.
4. Chop fresh green garden waste as it becomes available and stir into the bin
5. Turn the pile when the bin is full. (Keeping one bin free will facilitate turning)

TROUBLESHOOTING

If you add too many 'greens' you'll get a slimy, stinky, anaerobic mess. Add browns should this occur.

COMPOST TEA

Compost tea is easily made by soaking or steeping compost in water. The resulting compost tea is used for either a foliar application (sprayed on the leaves) or applied to the soil. Garden plants can benefit even more by using compost tea. Compost tea:

- Increases plant growth
- Provides nutrients to plants and soil
- Provides beneficial organisms
- Helps to suppress diseases
- Replaces toxic garden chemicals

GREEN COMPOST MATERIALS

Green Compost materials have high nitrogen values and provide organisms nitrogen for protein synthesis.

⁴ Fruit and vegetable wastes are particularly appealing to pests, such as flies, rats and raccoons. Burying wastes within the pile will help to avoid pests. If you bury the vegetable wastes in the pile, and pests are still a problem, you may need to screen the pile or keep vegetable wastes out.

	C:N (Carbon:Nitrogen) ratio		C:N (Carbon:Nitrogen) ratio
Grass Clippings	9-25:1	Pine Needles	60-100:1
Garden Weeds	19:1	Coffee Chaff	?:1
Coffee Grounds	20:1	Corn Stalks-brown	60:1
Seaweed	5-27:1	Straw 50-150:1	
Fruit waste	20-50:1	Burlap?:1	
Vegetable waste	11-20:1	Cotton Dryer Lint	?:1
Potato Tops	25:1	Newsprint	400-850:1
Corn Stalks-green	?:1	Cardboard	200-550:1
Leguminous Plants	15:1	Sawdust	400-750:1
Yard Waste/Garden Debris	15-55:1	Rotted Sawdust	150-250:1
Alfalfa Hay	13:1	Hardwood Bark	115-435:1
Spent Grain	? :1	Softwood Bark	130-1285:1
Spent Hops	?:1	Hardwood Chips/Shavings	450-820:1
Alder Leaves	25:1	Softwood Chips/Shavings	210-1,310:1
Mushrooms	?:1		
Cottonseed Meal	7:1	COMPOSTING MATERIALS USED LIST ⁵	
Soybean Meal	4-6:1	Aged wood chips	
MANURE		Apples	
Chicken	3-12:1	Banana peelings	
Cow	11-30:1	Burlap bags	
Horse	22-50:1	Carrot pulp	
Rabbit	6:1	Coffee chaff	
Sheep	13-20:1	Coffee cups, incidentally included in our espresso grounds	
Pig 5-19:1		Coffee grounds	
Night Soil	6-10:1	Corn stalks	
Urine	0.8:1	Crab	
Blood/Blood Meal	3:1	Culinary school kitchen waste	
Fish Waste	2.6-5:1	Diaper lint	
Crab Waste	4-5:1	Egg cartons	
Shrimp Waste	3.4:1	Egg shells	
Oyster/Mussel Waste	2-4:1	Fish scraps	
		Garden debris— a variety of, diseased & healthy	
BROWN COMPOSTING MATERIALS⁵		Glacial till	
Brown composting materials are high in carbon and provide energy for soil food web organisms.		Granite dust	
		Grape stems and grape pressings	
		Grass—aerobic and anaerobic	
		Herring	
		Human hair	
		Kitchen scraps— a variety of Leaves	

⁵ This is a list of materials that were composted at the Interbay P-Patch in 1999

Manure—alpaca
 Manure—chicken
 Manure—cow
 Manure—horse
 Manure—rabbit
 Mussel shells
 Mussels
 Nettles
 Newspaper
 (lots of it came with a manure compost)
 Oyster shells
 Oysters
 Path chips
 Pine needles
 Pumpkins
 Raspberry cuttings
 Salmon
 Sawdust—rotted
 Seaweed—a variety of
 Semolina from the bakery
 Shrimp
 Spent hops and grains
 Straw
 Volcanic ash
 Weeds—
 a variety of noxious types

Over-Wintering

The P-Patch garden season ends and begins again in October. Seattle's mild winters allow for year round gardening. If you're not growing winter crops you should be building your soil. Soil must be protected and cared for through the winter. Soil left naked will be injured in the winter months. The rains will leach the nutrients and winter weeds will grow and try to heal the wound. Winter is a key time for soil building

INTERBAY MULCH⁶

Introduction

As an over-winter method for building humus-rich soil, it would be difficult to improve on the “Interbay Mulch” (named after the P-Patch where it was developed) for effectiveness. Interbay-Mulched soil, according to lab tests, is “uniquely active”. Over a winter, an Interbay Mulch will give you a large volume of humus as well as a rich diversity of bacteria, fungi, protozoa, beneficial nematodes, arthropods, and worms.

Interbay Mulch is basically various organic matter culled from the urban waste stream piled on top of your soil and covered with damp burlap. Organic matter decomposes faster on top of the soil than it does when tilled into the soil as long as it is covered and kept moist.

Covering organic matter with burlap fools nocturnal, light-avoiding organisms into working for you 24 hours a day. Burlap will diffuse and soak up rain preventing it from driving into the mulch. It inhibits evaporation, keeping organic materials uniformly moist. Birds are unable to forage in the mulch so worms and other organisms flourish and multiply. Burlap covers the mulch but is also part of the habitat cultivating a rich variety of fungi and providing a home for beetles, spiders, worms and the like. Burlap is permeable allowing oxygen to reach all parts of the mulch.

⁶ Taken from Jon Rowley's *Building an Interbay Mulch* workshop handout October 2000

Every October the P-Patch program makes Burlap coffee bags available to gardeners at various distribution points.

Building the Mulch

The first materials used in an Interbay Mulch should come from your garden debris. The crops you raised took nutrients from the soil and now it time for them to be returned. Chop up your corn, bean, squash vines, tomato plants, etc. (Many experienced mulchers don't even worry about seeds because of ongoing top dressing mulches during the growing season making a weed free garden) If you are concerned about seeds or diseases hot compost those plants. Interbay Mulch uses the same "brown" and "green" mix used for hot composting, approximately 50-50. The more variety in materials added to the mulch the better.

Leaves are a brown that are easily obtained in the fall. Dried cornstalks and straw are good browns. Straw is even better if it is rotted. You can also add rotted burlap, cotton dryer lint, shredded paper, and season with a few pine needles. Woody material should be limited to rotted material that you can smoosh between your fingers.

Practically anything that doesn't burn when you put a match to it can be used as greens. Garden debris, green corn stalks, fresh grass clippings, coffee grounds (leave a bucket at your favorite espresso cart), juice bar pulp, spent grain and hops, seaweed, grape pressings, apple pressings, and so on. Any kind of organic manure is good.

Using compost as part of the mix will jumpstart the system. One wheelbarrow full of rough compost per hundred square feet is sufficient to get things going. Burlap from previous Interbay Mulch can also be used to inoculate your new mulch. The used sacks are full of dormant organisms just waiting to go to work.

Mix your greens, browns and compost starter to a depth of 6 to 18 inches deep. Make sure all materials are damp. Cover with burlap.

Maintaining the Mulch

Check the mulch for moisture during the winter. The burlap absorbs water and then quickly releases it to the cold and winds during the winter. Little moisture will find it's way into your mulch. This feature also keeps the rains from compacting and leaching the soil. If materials dry out decomposition comes to a halt. You can also feed your mulch during the winter like a worm bin. Adding materials once the mulch is active makes it work even better. Checking your mulch out in the winter will give you a chance to check out the fascinating soil food web biology at work. The biology is fascinating. You will have given birth to billions of trillions of organisms. Some you can even see! (See, See What Is In Your Soil)

Spring Planting

If you start your mulch in October you should have rich humus to plant into by March. If you started with 12" of mulch you will end up with 2-3 inches of soil-energizing

Green Manure Crops

CROP	PLANTING DATE	SPACING	SEEDS/100 Sq. feet	COMMENTS
Buckwheat	June–August	Broadcast	4 oz.	Summer green manure. Grows rapidly from May through July. Excellent weed control in any area that will be without a crop for 1 month. Requires little water. Attracts beneficial insects. It is not winter hardy.
Cereal Rye	Late Sept.–early Oct.	Broadcast	5-10 oz	Produces lots of biomass. Breaks down in 2–3 weeks. Roots loosen soil. Often combined with Vetch. You may want to “mow” before turning. Can be used as part of Interbay mulch for late seeded beds.
Crimson Clover	Sept.–mid Oct. and early spring	Broadcast	4 oz.	Legume. Requires well-drained and low acidic soil. Good for under sowing with cucumbers, tomatoes, peppers or under winter crops like kale and brussels sprouts, it will take over beds by March and be ready to swallow the stumps. Winter hardy, easy to grow. Broadcast seed evenly. Rake or till in to 1” depth. It will flower in April and must be tilled ASAP. Early spring beds can be hoed in and will rot with in days, just in time to plant mustards, spinach and other early spring greens.
Vetch	Late Aug–early Oct	Broadcast	5-10 oz	Legume. Soak seeds overnight before sowing. (“Soaking in compost will enhance germination and expedite growth. Often combined with Rye.
Fava Beans	Late Oct–Early Nov	6”–8”	12–14 oz	Legume. Soak seeds overnight (or use compost soak) before sowing. Large plants produce lots of organic material. Plant the right variety and you can harvest the beans.
Corn salad	September	Broadcast	1 oz	Good winter through spring salad green. Allow to grow in spring before chopping. Can be combined into Interbay Mulch for beds that will be planted late spring or early summer.

humus. You can till the mulch in or just plant right into it.

GREEN MANURE COVER CROPS⁷

What is Green Manure

Green manures are any crop high in nutrients that can be tilled back into the soil.

Like all plants Green Manures capture CO₂ and transforms it into sugars. Many have nitrogen fixing bacteria living around there roots which convert Nitrogen from the air to a form that plants can absorb The soil food web quickly decomposes Green Manure so the nutriments in the leaves and roots can be

⁷ Taken from Ray Schutte’s *Winter Cover Crops* workshop handout October 2000

taken up by the next crop. Cover crops can also be inter-planted with other crops.

Benefits

Cover crops add organic material to your soil. They make the soil easier to work. Cover crops help the soil hold water and nutriment for easy absorption by plants. Many cover crops have deep root structure that improves soil aeration and when the deep roots decay improve the soil structure. The deep roots loosen the soil and mine minerals which are made available to the garden. Cover crops are cheaper than buying commercial grades of compost and soil amendments. They protect soil from compaction and erosion by softening the impact of rain. Cover crops reduce weed crops. They prevent the leaching of soil nutriments by absorbing them

Planting

Determine your soil building goals. Is it nitrogen fixing, creating heavy biomass or breaking down compacted soil. Choose green manure crop for time of year and your soil building goals from the planting guide that follows. Mixing more than one crop together is a good idea. Consider a strategy to under sow green manures under maturing crops.

Harvesting

It is best to harvest green manures right after they have started to bloom. Harvesting

earlier is fine but plants will not have reached their maximum nutritional storage and biomass. After flowering green manures become woody and after they seed and take longer to break down. Bury them as you turn your soil or cut them off and chop them up. If you chop them up mix cover crop with the two inches of soil and treat as a mulch or use them in a side mulch. If you remove the chopped cover crop from your garden you will have missed out on its biggest benefit, feeding your soil. Allow buried crops to decompose before planting (one to three weeks depending on crop, soil and weather).

LEAF MOLD⁹

Introduction

Leaf mold is the product of decomposed leaves. In nature we commonly find leaf mold in the duff just below the surface of a forest floor. Leaves have a relatively high carbon content and relatively low nitrogen content compared with green matter from the garden.

The process of decomposing leaves alone differs from what goes on in a compost pile. Leaves by themselves break down primarily through the action of fungi and small critters called detritivores that eat fallen leaves. By comparison, a good, hot compost pile contains necessary amounts of high nitrogen-containing materials, which cause it to decompose primarily through the action of bacteria. Bacteria are very much involved in the leaf mold process

⁹ Taken from Jon Rowley's Leaf Mold Workshop, handout October 1999

but play a subdued role compared to compost where they dominate the process.

Leaf mold improves the soil tilth by holding large amounts of water and by binding soil particles together into aggregates. It also adds biodiversity in the form of all the life that caused the leaf decomposition. The fungi in leaf mold are especially beneficial for plants like berries, whose root systems require a fungal environment.

Build a Holding Cage

Build holding cages out of heavy 4 foot fencing wire. Each cage is a cylinder open at both ends. The cylinder measures about four feet in diameter and stands four feet high. Many P-Patches have existing leaf cages.

Build the Pile

Each kind of leaf has its own particular chemical makeup. Carbon:Nitrogen ratios vary from 25:1 in Alder (actually a very good ratio) to 80:1 for Oak. In addition, there are differences in trace elements like calcium. However, other than avoiding use of waxy leaves like holly and rhododendron, the differences among leaves should have little significance if you use a mix of different kinds of leaves rather than leaves all of one kind.

Make a pile of wet leaves. The wet leaves are dumped into the cage until it is full. If you have leaf mold, sprinkle some into the cage as you fill it. This will jump start the process by introducing the fungi and other

critters who will do the work. They will come on their own, but it helps to seed them. If you have some sunflower stalks lying about the garden lay them in the pile horizontally, and allow the end to stick out through the wire a couple of inches. This helps air to get into the pile at the beginning of the process. Later, when the critters are more numerous, the critters will make all the necessary air passages. If you don't have the stalks, don't worry, this process is very forgiving.

Every week or so add more leaves to keep the cage topped up. The leaves settle with time and break down. In fact, the volume of the finished product is only one tenth the volume of the leaves you put into the cage. Don't be shy about stockpiling leaves to feed your leaf cages.

It is a good idea to keep the pile covered with a tarp or a layer of straw to keep the leaves moist. Remove the cover before topping off the pile and replace it after making the addition of new leaves.

Harvesting

In this climate you will have to wait 10–11 months before you can harvest the leaf mold. You can harvest your leaf mold just in time to refill the leaf cage with the new year's leaf fall.

Use a pitch fork to dig out the finished material from the top of the finished pile. When you get the pile down to a level where reaching in and digging the stuff out gets difficult, get two or three people to help you. Have

the group surround the cage, grab the wire just above the level of the remaining material and gently rock, shake and lift the cage. In a short period of time you should be able to lift the cage off the remaining material leaving you with an empty cage to load with new leaves and a short pile of exposed leaf mold.

Using Leaf Mold

Leaf mold, with its fungal properties makes an excellent soil amendment or mulch for berries, perennials, roses and shrubs. Since it's a good idea to mulch these plants in the autumn, next year you should have the mulch material ready just in time.

You can screen the leaf mold and mix it with sand and other ingredients to make an excellent potting soil. Remember this is a high carbon material whose primary value comes from its physical and biological characteristics.

See What Is In Your Soil¹⁰

If you would like to see some of organisms are in your soil, you can easily make a pitfall trap to catch large arthropods and a burlesse funnel to catch small arthropods. Make a pitfall trap by sinking a pint or quart sized container into the ground so the rim is level with the soil surface. A roof over the top to keep out the rain is a good idea. Add ½ cup of non-hazardous antifreeze or ethyl alcohol to cup to preserve the creatures and

keep them from eating each other. Leave in place for a week and wait for soil organisms to fall into the trap.

To make a burlesse funnel, set a piece of ¼ inch rigid wire screen in the bottom of a funnel to support the soil. You can make a funnel by cutting off the bottom of a plastic bottle. Half fill the funnel with soil and suspend over a cup with a bit of non-hazardous antifreeze or ethyl alcohol. Suspend a light bulb about 4 inches over the soil to drive the organisms out of the soil and into the cup. Leave the light bulb on for about 3 days to dry out the soil. Pour the alcohol into a shallow dish and use a magnifying glass to examine the organisms.

PEST AND DISEASE CONTROL

Every garden contains bugs. Some are beneficial, others co exist without causing damage and others harm plants. A temporary excess of one type of bug will often correct itself. However, a number of things can be done to keep pests under control. A healthy soil food web will help keep pests and diseases under control. The life web above the soil can also contribute to controlling pests and diseases.

Start with an evaluation of the situation. Are you talking about a few holes in the lettuce or are you losing the entire crop. Sharing some of your crop with a pest is better than eating pesticides. Row cover crops can

¹⁰ Taken from Soil Biology Primer, USDA Natural Resources Conservation Service, August 1999. Available on line at www.statlab.iastate.edu/survey/SQI/primer/index.htm

provide barriers to many pests. Slug traps can help control slug populations. Two inches of complex compost can cure many plant disease and turn away a tide of aphids. One of the simplest ways to combat pests is to provide an environment for beneficial insects.

Beneficial Insects in the Garden¹¹

Beneficial insects are those which are helpful to us in some way. These include well-known flower pollinators such as bees and butterflies, and those which are natural enemies of insects we consider pests. The purposeful use of an insect to suppress other insects is one type of biological control and dates back at least to the fourth century A.D. when ants were manipulated to control citrus pests in China. Insect predators, in the immature and often adult stages, feed directly on their prey, killing them immediately. Examples of predator species are the praying mantis and the ladybug (lady beetles). Other insects parasitize their hosts by depositing eggs on or in them. Larvae emerging from the eggs typically develop within and emerge from the host. Parasitized insects usually continue to feed for a time before they die. Examples of insect natural enemies which parasitize pest species include many tiny wasps and flies.

Natural enemies are an important component of integrated pest management programs. For example, in home flower and

vegetable gardens adult and immature lady beetles can quickly reduce a population of aphids thus eliminating the need to apply a chemical spray. Suppression of pests by beneficial insects alone, however, can be variable. When pest populations are large and there is enough food and the proper habitat to support the growth and reproduction of natural enemies, the impact of beneficials on pest populations can be greater. When pest populations are low, beneficials will search elsewhere for a food source. Beneficial insects tend not to recover as quickly from exposure to insecticides as pest species do.

A number of beneficial insects occur naturally in your yard and garden. Learn to identify them and consider their needs in planning and maintaining your garden.

Attracting and Keeping Beneficial Insects

Alternative sources of food: Many predaceous insects feed on pollen, nectar or plant juices to supplement or replace their insect diet when host populations are low. Flower nectar also provides nutrition for egg-laying parasitoid species. Favored plants include daisies, Queen Anne's Lace (wild carrot), yarrow, alyssum, goldenrod, alfalfa, soybeans, clovers, and vetches.

Shelter: Provide areas of stable habitat in the yard and garden where beneficial insects

¹¹ Taken from The University of Georgia College of Agricultural & Environmental Sciences web page prepared by Cooperative Extension Service, written by Julie Balsdon, Educational Program Specialist, Extension Plant Pathology & Entomology and Beverly Sparks, Extension Entomologist. Available online at (NEED TO FIND)

can find protection from mowing, tilling and other disturbances. Perennial flower beds (especially those planted with pollen—and nectar-producing plants), hedgerows near flower or vegetable gardens, or plots of cover crops like alfalfa or soybean provide excellent shelter for beneficial insects. Predaceous ground beetles and rove beetles will take cover in permanent grass pathways in the yard and garden, in compost or mulch, and under rocks. Avoid excessive tilling by growing vegetables and flowers in raised beds.

Sources of water: Bird baths, small shallow containers, and temporary puddles provide water for insects. This is important especially during periods of dry weather. Change the water in containers every 2-3 days to discourage mosquitos from breeding in standing water. Sticks or rocks placed in the water serve as perches for insects so they won't drown. When pest populations are low, beneficials will search elsewhere for a food source. Beneficial insects tend not to recover as quickly from exposure to insecticides as pest species do.

A number of beneficial insects occur naturally in your yard and garden. Learn to identify them and consider their needs in planning and maintaining your garden.

Sources of Food for Attracting Beneficial Insects¹²

Simple flowering plants provide habitat and attract beneficial insects to the garden.

What's the bare minimum, maximum benefit plan??

I give a 4-6" border along my raised beds to marigolds, nasturtiums, allysums and dw.zinnias.

Throw in some herbs through out your plot—mints grown in a coffee can with both ends cut out, some chives and thyme (these last 3 are good near cruciferae), summer savory with your beans, some basils and garlic (to flower) among solanums, some dill inter-sown with a tall crop or at back of plot, some overwintered parsley to bloom, a radish (to bloom) in each hill of cucurbitae—

Your plot is a bennie truck stop!

Some “living mulches” among taller crops (cruciferae, solanum, corn...) such as allysums, nemophilias, tidy tips, california poppies and bluebells,even dutch white clover increases the effect exponentially. Let some crops bolt (deadhead before seed matures) to take it to the next level.

Throw in some of the real nectar-super producers along the edge w/ the annuals (linums, phacelias, gilies, clarkias, godetias, dw. coreopsis, violas, dwarf bachelor buttons...) some fall/winter/spring bulbs

Prepare for the haze! You'll get more/more reliable pollination and consistent control of your pests. Beyond that, it's a personal art—you'll refine your plan for your crops and microclimate as you go. A minimum of “land wasted on flowers”, a maximum of

¹² Taken from Sean Phelan's *Attracting Beneficial Insects* workshop handout April 2000

output with little labor. It's the only way to fly!!

NOTATIONS: (A = Annual, B = biennial;
P = perennial, I = intermittent through the year,
F = through to frost, ** = super nectar producer)

ULTRA EARLY (THROUGH WINTER)

Aconite (**; P)
Borage (I, **)
Calendula (I, **)
Crocus autumn (pulchellus, albus, zonatus... **, P)
Cyclamen (P; neopalitanum, hederifolium,
 Coulm... **, P)
Narcissus (earliest) (**, P)
Snowdrops (**; P)

EARLY

Bolting cruciferae (A, **)
Daffodils and Narcissi (Early) (P, **)
Eosemary (P, **)
Glory-of-the-snow (Chinoxidora) (P, **)
Iris reticulata (P, **)
Primrose (P; early)
Tulips (species tarda, hageri) (P, **)

MID_SPRING

Daffodils Single (P)
Primrose species (P)
Scillas (P, **)
Violets (P, **)
Violas (P, I, **)
anemones (Spring-St. Brigid's mix, monarch
 de caen... **, P)
allysum (annual-I; and perennial; **)

HIGH SPRING

Late Single Daffs (**; P)
Tulips-single (P)
Dutch iris
Aquilegia (columbine... P)
Armeria maritima (native-sea pinks.. **, P)
Candytufts (annual-F, P, **)
Dianthus (sweet williams, some F; and per.pinks)

creeping phloxes (P; **, incl. native P. subulata)
 Campanulas (P)
Centaurea (A, P, I; **)
Digitalis (Foxglove) (B, **)
English daisy (B; **, bellis)
Godetia (F; **, summer's herald-native)
Clarkia (F; **, native-mountain garland)
Linaria (F; **)
Lupines (A, P)
Lunaria (B; money plant)
Pyrethrum (Painted Daisy) (P)
Saponarias (Soapwort) (P)
Stocks (F, **)
Bluebells California (Phacelia Campanularia)
 (A, **)
Nemophilias (A, **)
Tidy tips (A, **)
Myostosis (Forget-me-nots (B; **)
Poppies-single (all) (A, P, I, **)
Sweet peas (A, **)

EARLY SUMMER

Anagallis (P; blue pimpernel)
Bidens (P; golden goddess)
Achilleas (P; I; F; **, incl. native A. millefo-
 lium)
Nasturtiums (F, **)
Chives (**; P; both galic and regular)
Parsley (**; B)
Cilantro (A, **)
Erigeron (A)
Dill (A, **)
Mints (A, **)
Dimorpethecas (F; african daisy)
Dahlberg Daisy (F)
Shasta Daisy-single (some F)
geranium (some F; true geranium—NOT
 pelargonium)
Gilia (**, birds eyes)
Purple tansy (**; phacelia tanectifolia)
Silene (**; P; catchfly)
Hesperis matronalis (P; **, sweet rocket)
Linums (**; A & P)
Lobelias (A—F; & P)

Monarda (**; P)
 Nepetas (**; P;F; catnip, catmint...)
 Potentillas (P, F)
 Spireas (P)
 Viscaria (**; rose angel)
 thymes (**; P)

HIGH SUMMER

Agastaches (**; P; licorice mint...)
 Asclepias (**; b-fly weed)
 Asters-single (A&P; F; **)
 brachymone (F; swan river daisy)
 Basils (**)
 Catanache (P; cupid's dart)
 Centranthus (P; F; jupiter's beard)
 Cleome (F; spider flower)
 Annual chrysanthemum (F)
 Convulvulus (F)
 coreopsis (F; **)
 Cosmos (F; ; A&P)
 Dianthus (F; A &P; carnations, ann. pinks...
 singles)
 Eupatorium (**; joe pye weed)
 Gaillardia (F; **; A & P)
 Gazania (transvaal daisy)
 Hollyhocks-singles (**; P, B & A; singles)
 Marigolds (**; F; singles-“gem” series
 T. signata)
 summer savory
 Zinnias (**; F; singles; africans
 “profusion”series)
 Salvias and sages (some F; **; A & P)
 Oreganos (**; P)
 Malvas (P)
 Mimulus
 Penstemons (P; some F; incl. natives)
 Gauras (P; F; **)
 Phlox (F; A & P)
 Phystostegia (F; P; obedient plant)
 Portulaca (F)
 Sunflowers-singles (**; F; A & P)
 Tahoka daisy (**; F)
 Torenia (F; wishbone flower)
 Trachymene (F; **;blue lace flower)

Verbenas (F; **; A&P)
 Verbascums (**; P)
 Veronias (P; **; F; speedwell)
 lilies (**; P)
 Daylilies-singles (**,P;some F)

LATE SUMMER

Asters-singles (F: A&P: late)
 Amaranthus (F)
 Echinaceas (**; P; F; coneflowers)
 Calliopsis(**; F)
 Rudbeckias-sigles (**; F; P; black-eyed susans)
 Ratibida (**; F; P; prairie coneflower)
 Ornamental grasses (P—important p[art of
 bennies life-cycle)
 Oenetheras (**; P; F; evening primroses)
 Sedums (**; F; P; incl. natives)
 Early, single mums (F; P)
 Tithonia (**; F; mexican sunflower)
 Solidagos (**;F; goldenrods)

FALL

colchicums (**; P)
 late single mums (F; P)
 late sedums (**;F; P)
 fall anemones(**; F; P)
 saffron crocus (**;P; all autumn crocus)

PLANTING

Selecting seeds and plants

You will need to secure seeds or plants. Select seeds or plants for the season you plan to plant them in the garden. Spring broccoli will not survive as a winter crop. Many organic seed/plant suppliers now have on line catalogs. Seed catalogues are usually available for the asking. Seed catalogues make great reading and include information that can be used in planning your garden.

It is more challenging to find organic plants at your local nursery. Many organic

plants can be mail ordered; however you will pay more. Many gardeners use a window with southern exposure to start plants for transplanting. You can use a florescent light if you do not have southern exposure. You will want to start early if plant to start plants indoors. You will need to “harden” off transplants by giving them increasing time outdoors before you plant them in your garden.

The seed and plant suppliers listed below have taken the Safe Seed Pledge that they do not buy or sell genetically engineered seeds or plants.

The Cooks Garden, PO Box 535, Londonderry, VT 05148 (800) 457-9703 www.cooksgarden.com.

Garden City Seeds, 778 Highway 93N, #3 Hamilton MT 59840 (406) 961-4837 www.gardencityseeds.com.

Johnny Selected Seeds, RR1 Box 2580, Foss Hill Rd, Albion, ME 04910 www.johnnyseeds.com

Seeds of Change, PO Box 15700, Santa Fe, NM 87507, (no phone calls) www.seedsofchange.com.

Territorial Seed Co. PO Box 158, Cottage Grove, OR 97424 (541) 942-9547 www.territorial-seed.com.

Not all of the seeds from these suppliers are organically grown. Their catalogues will identify organically grown seed. Some seed companies sell their best seed to farmers. They sell their left overs to seeds to gardeners. Check the seed catalogue to make sure the supplier grows their own seed and pay attention to germination rates. Keep seeds in

a cool, dry and bug-free place. Most seeds will be usable for several years.

When buying plants from garden centers or grocery stores, be careful with your selection. Look for dark green plants. Make sure the stem is straight and strong. When a plant stem bends as it comes out of the soil, beware it can mean poor future growth. Avoid plants that are tall and leggy.

PLANTING

Take the time with the seed catalogues and gardening books to know the needs of the particular plants you have selected. Determine which ones can be planted next to each other. Consider their needs for sun and shade. Keep in mind your neighbors garden, so that your crops do not shade theirs.

Our average first frost date is around April 15th and our last frost date around October 15th. These dates can serve as guidelines for frost sensitive plants. Dates will vary and in gardens such as Picardo usually have earlier frost dates. Talking to long time gardeners at your site will give you good information on developing your own site tailored planting guide.

You will know your soil is ready for planting, when you can take a handful and squeeze it forming a clump. The clump should crumble when you stick your thumb in it. Never work extremely wet soil, especially clay, as it will damage the soil structure. If the soil is too wet and cold seeds won't germinate. Row covers can be used to warm the

soil. Row covers will also help keep the seeds moist as they germinate.

SPACING

In your planning you will have decided whether you will plant in rows, mounds, raised beds or areas. You should have also considered how far apart your plants should be, as that will dictate the length and distance between rows. Consider the plants roots. Give the plant room to grow. The general guideline would be that the plants be far enough apart that the canopy will barely touch when ready for harvest. Well-spaced plants make it possible to mulch; develop better flavor and higher yields.

When you walk between rows in your garden you will be compacting the soil. Few roots will be able to penetrate heavily compacted soil. Consequently, plant growth can be stunted if you grow in narrow rows and walk too close to your plants.

ROWS & BEDS

Mounding rows of soil will help keeping the spacing wide between rows while providing a space to walk. Mounded soil helps with drainage and provides deeper topsoil. Many gardeners leave the soil mounded year round and there by reduced compaction from walking.

Many gardeners plant in raised beds. Raised beds should not be more than 4 feet wide. It should be comfortable to reach the middle of the bed. Since you don't walk on the raised beds the soil does not become

compacted. Soil will warm earlier in raised beds and good drainage makes it possible to get an early start in the spring.

SOIL PREPARATION

If you have properly prepared your garden for winter, you will not have any weeds to remove. Depending on your winter soil preparation will determine whether you till the soil.

Winter cover crops, green manures, should be harvest before or right after they have started to bloom. Harvesting earlier is fine but plants will not have reached their maximum nutritional storage and biomass. Bury them as you turn you soil or cut them off and chop them up. If you chop the cover crop mix it with two inches of soil and use it as side mulch. Allow buried crops to decompose before planting (one to three weeks depending on crop, soil and weather.)

If you inherit a garden that was not prepared for feeding the soil over the winter in preparation for spring, you will need to add some compost and maybe some other organic materials. It will be important to include heavy side mulching in your plans.

SOWING SEEDS AND TRANSPLANTING

Sow seeds about three times as deep as the width of the seed. Use the smallest width for flat seeds. Seeds can be sown a little deeper in dry weather than in wet weather. Seeds need warmth to germinate and grow. Seed catalogues should give the soil temperature

VEGETABLE	Days	15-Feb	01-Mar	15-Mar	01-Apr	15-Apr	01-May	15-May	01-Jun	15-Jun	01-Jul	15-Jul	01-Aug	15-Aug	01-Sep	15-Sep	01-Oct	15-Oct	01-Nov	OW
	120												H	H	H					
BRASSICAS																				
Broccoli	80									P	P									
Brussels Sprout Sets	120		T	T	T															H
Cauliflower Sets	70		T	T	T															H
Chinese Cabbage Set	80						T	T	T		H	H	H	H						
Cabbage sets	90		PT				H	H	H	H	H	H	H	H						
Kale	50									H	H	H					H	H	H	H
Poc Choy	50	H	H												H	H	H	H	H	H
FRUIT VEGETABLES																				
Egg Plant	70							T						H	H	H	H			
Tomatoes	90							T						H	H	H				
Pepper	80							T						H	H	H				
CUCE'S & SQUASH																				
Cucumber	60								PT	T			H	H	H	H				
Pumpkin	110					P			T											H
Summer Squash								PT	T											
Zucchini	50							PT	T				H	H	H	H				
HERBS																				
Basil	40								T				H	H	H	H				

for germination. Moisten newly sown seeds with a fine mist. A row cover is recommended. A healthy soil is a heaven for critters that birds feed on. Birds also like new seedlings. The row cover will also help keep newly sown seeds moist.

Soon after the seeds sprout you will need to thin them to provide for their growth. Some thinnings make good eating. Small lettuce plants can be eaten root and all, just wash the dirt off. Seedbeds can be used to start seedlings and then after the plants get

¹³ This guide was synthesized from many sources by Ray Schutte for his use at Interbay. Planting and harvest dates may vary for up to two weeks at other locations.

some size they can be transplanted into rows. Plants do not have to grow in rows. Some plants such as lettuce does quite well in circles, rectangles, squares etc. What is important is thinning to the proper distance.

Transplanted plants must be made to feel at home. If you are transplanting from a pot, break up the root ball. The general rule is to plant the plant slightly deeper than it was in the pot. Plants transplanted from a seedbed will not have a root ball. Seedbed seedlings should be carefully removed to preserve as much root as possible. Firmly press the soil with your fingers around the transplant and water it right way. The water will settle the soil and remove any free air trapped around

the roots. It will help make the plant feel at home. The plant may wilt as it works to restore its natural water supply system (roots).

Crop Rotation Planning¹⁴

Crop rotation is an important factor when planning the vegetable garden. Many disease organisms are soil-borne and may persist in the soil for several years. Disease problems can increase when the same crop is planted in the same area in successive years. Annually rotating your vegetables in the garden can help reduce the severity of diseases. Annual rotations also help build diversity in your soil by leaving root structures from different crops in the soil feeding different microorganisms.

GROUP A

Beans
Basil
Endive
Lettuce
Peas

GROUP B (LIME)

Arugula
Kale
Broccoli
Kohlrabi
Brussels Sprouts
Mustard
Cabbage
Okra
Cauliflower
Radish

Collards
Rutabaga
Turnip

GROUP C (LIME)

Beets
Parsnips
Carrots
Pepper
Celery
Potatoes
Chard
Spinach
Eggplant
Sweet Potatoes
Parsley
Tomatoes

GROUP D

Cucumbers
Gourds
Melon
Pumpkin
Squash

GROUP E

Chives
Onions
Garlic
Shallots
Leeks

GROUP F

Corn

¹⁴ Crop rotation table synthesis from many resources by Ray Schutte

Insect populations and plant damage may increase when the same crop is planted in the same area over several years. Vegetable crops in the same botanical family are often susceptible to the same diseases and insects. For crop rotation to be effective, gardeners should not plant vegetables belonging to the same plant family in the same location for three to five years. Obviously, crop rotation in a small garden may be difficult. To assist

crop rotation efforts, the following list places common vegetables in groups. Members of the same group should not follow each other.

Other good guidelines are Steve Solomon's *Growing Vegetables West of the Cascades* and Seattle Tilth's *Maritime Northwest Garden Guide*.