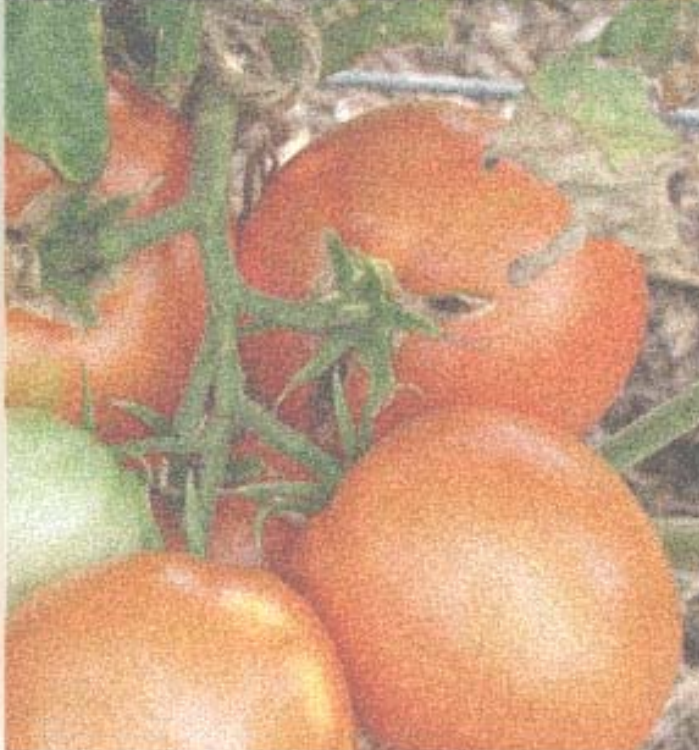


*A Handbook for Dowling
Community Gardeners*



Foreword

Joining a community garden—or indeed any organization—is often a sink or swim experience. This can be particularly true for people new to gardening. Finding the right person to answer your questions is not always easy or convenient. Seeing the same difficulties arise for new members year after year, the Dowling Garden Committee chose a handbook as a way to ease this transition.

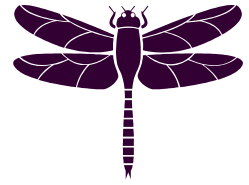
Our aim was not to write the complete manual of gardening. If such a book exists, it is most certainly hyperbole. Instead, we wanted to produce a roadmap to helpful solutions and a brief synopsis of the gardening experience at Dowling. This document consists of two main parts.

- Part 1, the *Introduction*, serves as an overview, doubling as an orientation handout for new members.
- Part 2, the *Gardeners' Handbook*, expands on topics covered in the introduction.

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Introduction

Welcome to Dowling Community Garden! For a city dweller, the community garden is one of the greatest resources available that will provide you with fresh produce. It is a great place to meet people from all walks of life, to exercise your body and mind, and, in the case of Dowling Garden, to experience a wonderful nature-preserve style landscape in the midst of an urban setting.

This handbook will introduce you to Dowling Community Garden and provide you with the information you need to have a productive and enjoyable gardening experience.

A little history

Dowling Community Garden has a long and absorbing history. One of the oldest community gardens in existence, it started as a Victory Garden at the beginning of World War II. Because of wartime shortages, the U.S. government encouraged people to garden as a way of supplementing their food supplies, as well as giving them an activity that was considered worthwhile.

The Victory Garden was not just a community effort, although community-style gardens were established too. People started gardens wherever they could find or create the space, and most of the gardens were on private land. Garden plots at this time were generally much larger than today, often 10,000 square feet and larger. After the war, at least initially, people continued to use the gardens in which they had invested so much effort. Soon, however, the Victory Gardens and urban gardening in general dwindled. A few, like Dowling, continued and there has always been some interest in urban gardening.

Today urban gardening is seeing a resurgence, and as land in the city becomes more dear, so too does the community gardening experience. While plots started out enormous—some 100' by 50'—today the average plot at Dowling is about 20' by 20', much more manageable for the current urbanite, who has to juggle work and personal time more closely.

If you want more information about the Victory Garden movement and about Dowling Garden in particular, resources are available on the Web—

- ❖ Wikipedia has good links: http://en.wikipedia.org/wiki/Victory_garden
- ❖ The Dowling Community Garden Web site offers a detailed history; you can find it at <http://www.dowlingcommunitygarden.org/pages/history.htm>

Dowling Garden in the 21st century

Dowling Community Garden is sited on land owned by the Minneapolis School District to the east of the junction of 46th Avenue South and 39th Street. It is situated on ground that is connected to the Dowling Urban Environmental Center's campus. We lease about 3 acres of this land from the Minneapolis School District and enjoy certain amenities, such as our water supply and a fence around the Garden, because of this association.

The land that we lease is divided in two parts, the north garden and the south garden. We have installed plumbed water lines throughout both gardens. A shed constructed by Garden volunteers is sited just north of most of the south gardens; it contains gardening tools and implements shared by our gardeners and owned by the Garden.

Our gardener population as of 2009 is about 280, divided into primary gardeners, referred to as ploholders, and garden partners. We have about 200 plots, 8 of which are handicap-accessible raised beds, built by Dowling gardeners and funded by NRP (Neighborhood Revitalization Program) grants. Besides the gardens that we sublet to our gardeners, we also have a number of complimentary plots that are used for demonstration purposes. Additionally, we have several flower gardens with seating whose main purpose is to enhance the area and provide a respite to both our gardeners and the community.

The structure of Dowling

With a large population, utilities, property owned in common, and political interests, The Garden sometimes has the complexity of a small town. The Garden is managed by the Dowling Garden Steering Committee. The Committee establishes and enforces rules for the common good of our gardeners, sets plot fees, introduces improvements, and promotes events of interest to the Garden. The bylaws for the Committee can be found on the Garden's Web site at <http://www.dowlingcommunitygarden.org/pages/mission.htm>.

A large amount of labor must be performed to keep a garden of this size running smoothly. To organize this work effectively, we have Coordinators whose job is to oversee the various tasks and the gardeners who perform them. Some Coordinators are Committee members, and some are chosen from the general Garden population. More information on the various Coordinator positions can be found beginning on page 8.

The gardeners from each plot are required to perform a minimum of 4 hours in service to the Garden each gardening season. This service can be filling water barrels, maintaining paths, delivering surplus produce to food shelves, maintaining garden implements and tools, managing the Garden Web site, working in demonstration gardens, tending flower gardens, or assisting at the various events and cleanup days the Garden hosts each year. More information on the various service tasks can be found beginning on page 12.

Personal and social conduct

With such a large population, social interaction with other gardeners is very common. Some of our gardeners are interested in heirloom vegetables, while many others are excited by new varieties of vegetables and flowers. Seed purchasing in the spring can reach a fever pitch, and conversation on this subject never lags throughout the year. We have gardeners who save seeds of heirloom plants, and they are just as excited as their new-variety brethren. Everyone wants to grow healthy plants, and most people will be happy to talk to you about their favorite methods to accomplish this.

Social interaction aside, do not enter another persons garden uninvited. Do not pick their vegetables unless they specifically request this, such as when they will be out of town and miss a harvest. If you have a disagreement with another gardener, settle it amicably. If you cannot, contact a Committee member for assistance. If a Committee member is not readily available and the situation is not critical, phone the Garden's voicemail or send a note to the Garden's e-mail. If the dispute should take a turn for the worse, leave the Garden. Violence will **not** be tolerated and can be the cause for immediate forfeiture of your plot and all garden privileges.

Some gardeners enjoy having their children with them in the Garden. This is, of course, something that we should encourage. However, children must understand and follow the same rules of behavior as our adult gardeners. Additionally, children are not permitted to use power equipment in the Garden, and they must be supervised when in the shed. If you send your child to the shed to return a tool, make sure he or she understands how to do this properly. The shed should be locked when there is no one in attendance. If your child is too young or unable to

accomplish this, do not send him or her to the shed. Your children should be under your supervision at all times.

Personal pets such as dogs must be leashed—**always**. This is required by city ordinance. Unleashed pets in the Garden can result in a violation notice. If your pet threatens another gardener, it must be removed from the Garden immediately! If your pet shows a pattern of this kind of behavior, it is unwelcome in the Garden at any time. Do not let your pet defecate on or in another person's garden.

Water in the Garden

Dowling Community Garden has water outlets along all of the main pathways in the garden. These outlets require the use of a special faucet called a bayonet. The bayonet acts like a key that fits into the outlet and is turned to allow the water to flow.

The north and south gardens have different-sized bayonets that cannot be used interchangeably. There are hoses in the shed and also mounted at strategic spots around the Garden for use with the bayonets. Read more about this process on page 13 of the handbook.

While the outlets are very convenient, gardeners sometimes find it is too much effort to hook up a hose for a small amount of watering. For these times, barrels have been placed throughout the garden for use with watering cans. These barrels are topped off by gardeners who are fulfilling their service commitment.

Tool and implement use

Dowling Garden maintains a collection of garden tools for the use of all of our gardeners. These tools—shovels, hoes, digging forks, and rakes—can be found in the shed. Also in the shed are watering cans, watering wands, wheelbarrows, and hoses. Gardeners should take all necessary care of the tools and return them to the shed when finished using them. Clean mud and soil from shovels and hoes before putting them away. Replace hoses in a neatly rolled manner and hang them on the appropriate hangers.

Use the tools in the way they were intended to be used—in other words, don't hammer or pry with a shovel. Do not abandon any of the Garden's tools or implements in your garden or take them home. Do not abandon wheelbarrows outside of the shed or in the woods. Leave a note to the Maintenance Coordinator if you find a broken tool.

If you have a gardening tool at home that you no longer want, please don't just drop it off in the shed. Sometimes we need more tools, and sometimes we don't. Leave a note for the Maintenance Coordinator, he or she will let you know if we need your donation. Read more about tools on page 14.

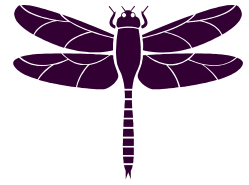
Garden rules

A large garden such as Dowling Community Garden has a large population of gardeners. Because of this and all of the complex dependencies that arise due to our relationship with the school system, we have a set of rules governing behavior and responsibilities in the garden. Our current rules are issued with the annual agreement form and can also be found on the Garden's Web site at <http://www.dowlingcommunitygarden.org/pages/rules.htm>.

Lions and tigers and pesticides, oh my!

Appropriate use of chemicals in the Garden can be a difficult issue to resolve. Dowling Community Garden is not an "organic only" community garden. However, we are limited in chemical use by Minneapolis School District policies. These policies can be confusing. Additionally, unrestricted use of chemicals in 200 garden plots would be extremely problematic. Some of our gardeners do prefer to grow "organically," while others don't care about or don't understand the divisions involved in organic and non-organic. For more information about this topic, read *Chemicals in the garden*, page 15.

To simplify matters, we disallow use of herbicides completely. There is no need for this category of chemicals; weeds can be manually removed in garden plots the size available at Dowling.



Gardeners' Handbook

The introductory chapter touches on a variety of topics. This chapter offers a more in-depth look at many of them. It discusses the following topics:

- The organizational structure that keeps the Garden running
- Conduct in the Garden
- Accessing the water supply
- Using shared tools and implements
- Chemical use
- Personal safety
- Demonstration gardens
- General gardening guidance

Dowling Garden's organizational structure

Dowling Community Garden would not exist without the efforts of the three groups that make up its structure: the steering committee, the coordinators, and the member gardeners. This section describes each group and its role in the Garden.

Steering committee

In its infancy, Dowling Community Garden was a Victory Garden. People came together, co-opted a piece of land, staked out their plots, and started gardening. The population was small and the gardens enormous by today's standards. We don't know precisely how the Garden was originally administered, but the biggest problem was probably getting something to grow in the poor soil.

Today the soil is much improved, but the management of Dowling Garden is more difficult and time consuming. To synchronize all of the varied tasks, coordinate liaisons with outside organizations, troubleshoot day-to-day and seasonal problems, and plan for the future welfare of Dowling, we have a Steering Committee.

The Committee is simply a group of Dowling gardeners who have come together voluntarily to supervise the operation of the Garden. The Committee has meetings once a month for most of the year. Besides being involved in the activities mentioned previously, Committee members also serve in some of the Coordinator positions, carry out tasks that no one else covers, and—of course—garden their own plots.

Coordinators

Coordinators oversee the many and varied tasks that keep a large community garden like Dowling functioning. Using coordinators is the natural outcome of trying to give structure and organization to all of the jobs that our gardeners undertake. Membership, Finance, and Database tasks are always performed by Committee members, but other coordinators' role are integral to the Garden as well. The following paragraphs describe some of these coordinator positions.

Membership coordinator

Dowling Garden has a turnover of about 10 to 15 garden plots a year. We get requests for gardening space from more than twice that number of people during the same period. To keep track of requests and the waiting list this has created, we have a Membership Coordinator.

Besides keeping and updating the waiting list, this person assigns plots, introduces new gardeners to their new gardens, and helps them get acquainted with the larger experience at Dowling. If there is one person who knows everyone at Dowling, it's the Membership Coordinator. Our current Coordinator is a virtual encyclopedia of names and faces.

Finance coordinator

Without a coordinator of finance, an organization of this size would quickly fall into chaos. Money comes into Dowling in the form of garden fees from our members and sales, such as our yearly plant sale. Occasionally, we receive grants. It goes right back out again for rent and repairs and insurance and improvements, such as new water lines, and amenities, such as composted manure. These transactions must be controlled by a budget so that we can keep things going in the current season and plan for the future. Besides managing all of this business, the Finance Coordinator is instrumental in preparing a rent formula and revenue forecast for the following year. He also keeps the Garden Committee up to date on these matters in a monthly report.

Database coordinator

Until a few years ago, all of the information about our plots and gardeners was kept in a spreadsheet. While this constitutes a database of sorts, it was not powerful or flexible or secure enough to serve a community of nearly 300 people.

Now that we have a real relational database, we can quickly create a mail merge to issue gardening agreement forms. We can access information on plot sizes and costs and service assignments as well as providing updated contact information for our service coordinators.

The Database Coordinator makes sure that data is current. Any data issued by this coordinator to other coordinators is strictly on a need-to-know basis. All information is kept secure, and no data is given to outside organizations.

Weed survey coordinator

In Minneapolis, the ordinance containing restrictions on weeds goes something like this—

Any weeds or grass growing upon any lot or parcel of land in the city to a greater height than eight (8) inches or which have gone or are about to go to seed are hereby declared to be a nuisance condition and dangerous to the health, safety and good order of the city.

As in most places in the world, Dowling has unwanted plants commonly referred to as weeds. What we try to do at Dowling is keep the weeds controlled. Besides the issue of conforming to the city ordinance, we attempt to keep the gardens tidy so that we are seen as a community asset. When a gardener is forgetful in this, the Weed Survey Coordinator issues a gentle reminder, sometimes by e-mail, sometimes by postcard, sometimes personally.

The Weed Survey Coordinator or her crew walk the garden paths looking for gardens that are failing to keep weeds controlled. This is not as easy as it would seem. The difference between two gardens is often a matter of degree. However, if a garden has more weeds than cultivated plants, if there is a profusion of weeds more than 8 inches high, or if there are large areas that appear uncultivated and weed infested, the Weed Coordinator sends a friendly note to the gardener. In addition to weeds, this coordinator also looks for trash and debris that need quick attention.

A side benefit of this position is being able to observe all of the varied gardening practices and wonderful collections of produce.

Surplus produce coordinator

Through oversight or intention, our gardens often produce more than we need. Often we give the surplus to friends or, sadly, sometimes we let it spoil. In Minneapolis, as in most cities, there are people in circumstances that make getting enough fresh food for themselves and their families difficult. Donating our fresh surplus produce to local food shelves, where it can be distributed to people who need it, offers a partial solution to this problem.

Our Surplus Produce Coordinator is our liaison with some of the local food shelves. With the assistance of our gardeners, he is able to collect and distribute fresh vegetables to these organizations.

Dowling Garden stations containers in a central location that gardeners can fill with produce. We try to deliver this produce to the food shelves within 24 hours.

Plot survey coordinator

With almost 200 gardens at Dowling, an accurate map is an invaluable tool. With a map in your hand, it is possible to locate any individual garden plot within seconds. You can see the size of a garden and find out how close it is to water barrels or a water-line outlet. You can see your friends' plot in relation to your own and tell what parts of your garden will receive the most sun.

Originally, garden plot sizes and their perimeters were approximations, and plot addresses were mostly guesswork. With almost 300 gardeners, the old method led to too much confusion. As an aid to removing some of this confusion, we surveyed the whole garden. Each garden was measured and a garden map created. Paver bricks were painted with plot numbers and planted on the edge of each garden.

The Plot Survey Coordinator publishes updates to this map as changes occur over time. This person also arbitrates disputes over plot perimeters. When new gardeners join Dowling, Plot Survey may flag the corners of their new plot as an aid. Please assist this coordinator by keeping your plot's paver brick visible at all times.

Web site coordinator

A Web site is another useful tool for the Garden. It gives us local, national, and perhaps international visibility. It is a signpost and a communication device to the larger world outside of the Garden. Our site is also good form of communication for use with our own gardeners. We can publish news, update event info, and provide gardening advice. Giving links to our publications on the site frees us from

having to distribute hardcopy to our members and other people who may be interested in what Dowling is up to.

The Web Site Coordinator creates content and constantly updates information on the site. Links to our map plus info on our rules, history, mission, and service options as well as gardening and starting plants are all available.

Maintenance coordinator

While gardeners at Dowling could easily bring all of their own gardening implements, it is much more convenient to pool our resources and hold most of the tools we need at the Garden. Shovels, rakes, hoes, wheelbarrows, and so on are available for our use and are stored in a shed on the grounds.

With so many people sharing them, the tools need a plenty of care and feeding. This is the job of the Maintenance Coordinator and the gardeners assigned to help him. During a busy day of gardening, the shed can become thoroughly disheveled, with people and wheelbarrows going in and out, hoses dragged out to water and brought back, and tools vanishing and reappearing in a disorderly pile.

The Maintenance Coordinator manages the tool shed and almost all of Dowling's property in the Garden, including purchasing tools, hoses, and wheelbarrows and maintaining garden furniture, such as chairs and benches.

Path maintenance coordinator

We have almost a mile of paths at Dowling. To manage these, Path Maintenance sends our gardeners out into the Garden with power mowers and manual push mowers, string trimmers, and on occasion, hand-powered garden pruners. Some of our paths are wood-chip covered, and these require annual renovation.

Communications coordinator

Like any community, a large community garden such as ours needs a way to get timely information. The Communications Coordinator distributes news about upcoming events, notices, announcements, and answers to gardeners' questions.

With the use of the Garden's e-mail system, the Communications Coordinator can send out monthly update memos to gardeners efficiently and fast—and receive feedback just as quickly. He can assist other coordinators by contacting people about weed warnings, service-time queries, and cleanup-day reminders. Gardeners without e-mail service receive info by postcards and hardcopy letters as well notices posted in the shed kiosk.

Our members are encouraged to use the Garden's e-mail address for quick communication with the Committee or when they need a fast answer to their gardening inquiries.

Cleanup days coordinator

Dowling holds several general cleanup days throughout the season. Gardeners groom the areas held in common as well as tidying the shed. They clean the water barrels, pick up trash, bring out hoses in the spring, and put them away in the fall. Wood chips are distributed to paths in need of renewal.

Organizing these events and distributing these tasks is the job of our Cleanup Days Coordinator.

Gardeners

The remaining essential part of the garden infrastructure is the gardeners themselves. Gardeners participate in running Dowling Community Garden by honoring their service commitment. Gardeners from each plot are responsible to the Garden for a minimum of 4 hours of service each gardening season. Service assignments are made, whenever possible, based on service preferences the gardeners express when completing the annual agreement form.

Whatever the duties gardeners assume, they are responsible for documenting their time. A drop box is mounted on the inner side of the shed door, along with time sheets intended for this purpose. When completing a slip, please write legibly and include your plot number to ensure that you are properly credited.

In the usual scenario, a coordinator contacts gardeners early in the season with information and instruction about their service. Depending on the type of service, there may be further communication, or there may not be. If you are a plotholder and do not receive **any** communication once the gardening season is underway, you should contact the Committee. Regardless of whether you are contacted by a coordinator, you are still responsible for the 4 hours of service time.

Often, because of the vagaries of a situation, you may find the time you were to serve on a given day is short of what you intended. Perhaps you are on water-barrel service and filling barrels takes less time than you need for your commitment. In this case, refer to the list of general tasks posted in the shed kiosk. There should be something on this list that you would enjoy doing, and you can complete any short service time this way.

A word about the drop box and time slips—they are not intended to represent a “time clock” that you have to use to punch in and punch out. Absent any direct

supervision, the Garden wants to know that service work is being accomplished. This procedure also helps us determine where we need to allocate resources. You are not required to record your time to the minute; a rough estimate is fine.

Personal and social conduct

Gardening at a community garden can be a lone affair or it can be a social activity. Even if you come to the Garden for peace and quiet, you will certainly see other gardeners at the shed or tending their gardens or just wandering around enjoying a fine day. Neighborhood residents as well as Dowling School children and teachers and the general public also have access to the common areas.

Normal rules of civilized behavior apply to your visits at the Garden.

- Respect other gardeners' space. Do not enter another person's garden without their consent.
- Introduce yourself to your gardening neighbors, particularly if you are new to the Garden. Theft can be a problem at Dowling. If you and your neighbors become familiar with one another, unwelcome visitors will be much more noticeable.
- When you have finished using a communal tool or hose, return it to its rightful place.
- Be helpful to other gardeners.
- If you notice a hazard in the Garden, notify the Committee.
- If you bring your children to the Garden, make sure they understand the concept of personal space. Do not let them enter the shed or roam the Garden unsupervised.
- Keep your pet leashed and out of other people's gardens.

Water in the garden

As stated in the introduction, there are two water sources available to gardeners—water barrels and water outlets.

We have numerous water barrels distributed throughout the Garden. These barrels are filled by gardeners working on their service duties. The barrels have lids to keep small animals from drowning and cut down on algae growth. Watering cans are stored in the shed for your convenience.

The other sources of water are the water outlets, also distributed throughout the Garden. If you are new to Dowling, you can locate these outlets on the map. To access the outlets, we have bayonet taps. Bayonets can be found in the shed and in the locked box in the north garden. These taps work like keys; you push the bayonet into the outlet and turn it clockwise until water flows. Be careful with these bayonets, don't force them (you could damage the water lines).

There are two sizes of bayonets: 1" diameter for the north gardens, labeled **North** and ¾" diameter for the south gardens, labeled **South**. They are not interchangeable. If the bayonet you are using doesn't fit correctly, it is likely you have the wrong size. The bayonets also have "Y" attachments, so that two gardeners can use the water outlet at the same time.

The water from our water lines is not potable, meaning it is not suitable for drinking or washing produce to be eaten immediately.

Tool and implement use

Dowling Community Garden has an abundance of hand tools and other garden implements for use by its members. Some of these tools were donated by gardeners, but most were purchased by the Garden with money from plot fees and sales. Since most of these tools see hard use, we have worked to upgrade their quality over time.

Please use these tools only for their intended purpose. This concept may sound elementary to many gardeners; nonetheless, tool abuse is the most common reason our tools deteriorate and fail.

- Shovels and hand spades are for digging, not for prying rocks from your garden. (Use a pry bar for prying.)
- Use hoes for breaking up soil and weeding, not for prying rocks.
- Contrary to popular belief, digging forks are not designed for normal digging. They are intended for lifting potatoes and turning very loose soil. Dig with a shovel.
- Return hand tools and wheelbarrows to the shed when you have finished using them. Clean them before returning them.
- **Do not** allow your small children to move heavy loads in a wheelbarrow. **Do not** allow children to run with a wheelbarrow. Both of these activities are recipes for serious injury.
- As a courtesy to other gardeners, roll up hoses neatly before storing them.

- Wash off muddy hoses before replacing them.
- Return bayonets to their proper storage place—north water kiosk, the white locked box by the main water barrel enclosure, for north bayonets and the shed for south bayonets.

Chemicals in the garden

We do not allow unfettered chemical use. As a practical matter, with the closeness and large number of garden plots, the uncontrolled use of pesticides, herbicides, and fungicides could have disastrous consequences. Also, since we lease our land from the Minneapolis Public Schools, we are restricted in chemical use by their ordinances.

We request that you do not use chemicals unless you have a bona fide need. The necessity of chemical suppression varies with the season and with your crop. If you use pesticides or fungicides, follow the manufacturer's directions exactly. Be very careful to avoid overspray onto your neighbor's plot. Use **only** products that are in categories III and IV in the Minnesota Department of Education database. Here is the link - <http://education.state.mn.us/HealthAndSafety/Pesticide.do>. You **cannot** use a product if it is in category I or II. If you have a question about this, call our voicemail at (651) 255-6607 or use the e-mail, dowling.garden@comcast.net.

There are ways to defeat insect pests that don't involve chemicals. Row covers—translucent, porous fabric that covers and contains your plants—is very effective in reducing predation by Colorado potato beetles (one of our worst pests) and cucumber beetles. Companion planting and hand picking of pests are sometimes successful. You can grow plant varieties that are resistant to insect enemies or fungal blights. Get a head start by growing large strong plants before a pest is in season.

Get creative about protecting your plants. Buy some ladybugs at a local nursery. They will eat many different kinds of small insects and insect eggs, but what they really prefer is aphids. Praying mantises, also available from your local nursery, will eat anything they can grab and devour. Mantids might not be the best predator for your insect pests, they eat good insects as well as bad, but they are interesting to watch. Diatomaceous earth, the cell walls of tiny fossilized algae, is relatively benign and can be a real pain to slugs in your garden. You will need to reapply it after rain and only purchase a product intended for gardens.

Safety first, last, and always

Following is some practical advice and suggestions about personal safety.

Wear loose, comfortable clothing while gardening. During months that mosquitoes are active, avoid clothing that is dark blue, red, or purple. Mosquitoes may be attracted to these colors. They are also more active in the early morning and evening. Try to avoid wearing sandals.

The following information is compiled from our many years of experience in gardening. It should not replace your doctor's advice.

If you are stung by a bee or wasp or hornet, don't panic. Most of us have been stung, though rarely, and are still here to complain. The first thing you should do is check to see if a stinger is still in place at the site of the sting. If it is, gently scrape the stinger off of the site. A credit card or driver's license works well. Do not pull on the stinger; this may release more toxins.

The next thing you should do is cool the sting location with ice or water. At this point you have to decide about seeking medical help. If you have been stung many times, there is no decision to make. Seek medical help immediately. If you have had numerous stings in the past, seek medical help. People become more sensitized to insect toxins the more they are exposed to them. If you are a person who has extreme reactions to insect stings, keep the appropriate medicine handy.

Wash your hands when you have finished gardening. If you receive a cut or wound while gardening, wash it immediately. Soap is available in the shed. Plants and soil harbor a considerable number of microorganisms, not all of them beneficial. If you can, wear leather gloves when doing garden chores. Talk to your healthcare professionals about whether your tetanus immunization is up to date, and be sure to mention that you are a gardener.

Dowling Community Garden has traditionally been a safe and welcoming place. It continues to be. Nevertheless, if you feel threatened or in danger, leave immediately. Call 911 as soon as possible. If it is nighttime and you are on foot, keep to the middle of the street until you can reach a place of safety.

Demonstration gardens and other resources

In addition to providing garden space, Dowling continues to search for ways to improve the gardening experience. We do this by maintaining demo gardens, coordinated by members who have an interest in exhibiting various and interesting gardening practices.

The heirloom garden

In recent years there has been a reawakening interest in older types of flowers, vegetables, fruits, and even livestock. These older varieties were at one time abandoned by farmers and commercial interests for new and improved forms. Now, however, people are becoming interested in *heirlooms* because, although they may not necessarily travel well or produce in superabundance, they often taste better than the newer hybrids.

Championed by such organizations as the Seed Savers Exchange in Decorah, Iowa, and Seeds of Diversity in Toronto, Canada, the sheer variety of heirlooms is mind-boggling. In order to exhibit and test some of this diversity, Dowling Community Garden has an heirloom demonstration garden.

This garden showcases different crops every season and when possible, seeds are saved for distribution to Dowling members and to other gardeners at the Spring Community Garden Resource Fair. Take a stroll through this garden; you'll probably not see these veggies and flowers at your local big box store.

The herb garden

Traditionally, even when people lacked the space necessary to grow vegetables, there was often room for a small herb garden. Herbs, of course, are useful not just for flavoring meals, but also for medicinal purposes and for teas (sometimes as a tisane or medicinal tea). Although the advent of the grocery store and druggist made herbs (at least dried) and herbal remedies available to everyone, it was still usually easier to go out back to your herb garden and pick something fresh. Even the "dried at home" versions were better than you could, or can, buy.

Dowling has an herb garden to draw attention to some usual and some unusual herbs. We have some things like basil and thyme that everyone is familiar with and grows easily, but we also experiment with odd or exotic plants just to see what they look like, or if they will grow in this climate. When you examine the herb garden, you might spy sesame plants or cardoon or shiso amongst the fennel and tarragon and scented thyme. We like to try new things every year, so you never know what might turn up.

The seed-saving garden

The number of seeds for flowers, vegetables, herbs, and grains obtainable in the 21st century is probably beyond counting. Major commercial seed producers create new varieties every year in their quest to produce plants that are more beautiful, more productive, and more disease resistant. They're looking for flowers that conform to current fashion and last longer in temperate environments. Farmers want vegetable and fruit crops that resist diseases and insect pests, while giving bigger yields and more profit. Supermarkets want produce that arrives in good condition and stays that way longer. All of these are worthy goals. However, left behind are varieties that were cultivated by our ancestors or were grown in out of the way places and never enjoyed wide distribution.

Many of these heirlooms have value, and many gardeners today believe they deserve consideration in our gardens. Organizations such as the Seed Savers Exchange and Seeds of Diversity encourage gardeners to grow these heirlooms and distribute the resultant seeds to other gardeners. In this way, seed stocks of these older or exotic varieties are maintained for the future.

Some of our members save and share heirloom seeds, but we also have a garden devoted purely to saving seeds and demonstrating this process. If you visit this plot in the summer, you'll notice tomato plants with small finely woven bags enclosing some of the blooms. These bags protect the tomato flowers from pollination by bees and accidental pollination by wasps and ants and flies. This ensures that the seeds from the mature fruits have not been hybridized and remain true to the parent plant.

The compost demonstration garden

Waste disposal is a matter of interest to everyone, and most people see it as an inconvenience. Gardeners see it from a different perspective. To the smart gardener, garden waste isn't garbage, it's an asset. Properly composted, this material becomes the ingredient for some of the finest soil around.

Although simple in theory, composting nevertheless has a learning curve and not everyone is successful in making their first compost pile, some never quite getting the hang of it. To demonstrate effective methods for getting your compost to work and to provide our gardeners the benefits of good compost, Dowling has established a compost demonstration garden beginning in 2009.

Available to Dowling gardeners by subscription, this garden is an experiment to see whether we can establish a viable composting operation for the Garden. Individual gardeners have always had compost bins, but the Garden as a whole has

had to use the school's vegetation dump area to dispose of garden waste. This material then gets trucked elsewhere for composting and is not used by us.

The compost garden is divided into sections containing fresh vegetation, or green material, and dead vegetation, or brown material, plus a compost section where these two are mixed. The City of Minneapolis Solid Waste and Recycling has aided our effort by donating plastic compost bins.

Gardening guidance

*Kind thoughts, contentment, peace of mind,
And joy for weary hours.¹*

Gardening is a lot of work. If this thought never occurred to you, you're probably a new gardener. Veteran gardeners know this in their knees, in their backs, in the dirt under their fingernails, and in the sweat that soaks their shirts on a tropical July afternoon.

However, if you love gardening, if coaxing new life from a sleeping seed excites you, if you need to see things grow from vulnerable little plants to bountiful maturity, if you desire wonderfully fresh vegetables, then all of this work will be as play. Okay, it's still hard work, but you'll miss it when snow blankets your garden.

You're not limited to growing vegetables. There is a whole universe of flowers and ornamental plantings to beautify your garden. Try putting in a border of colorful flowers around your plot. If it's high enough and thick enough, it'll make a mighty nice fence. Consider planting a cutting garden that will supply your home with blooms all summer long. Experiment with color combinations or plant a different monochrome arrangement every year. Besides checking out the flowers grown by other gardeners, visit the flower gardens that Dowling grows to beautify the area. Look them over, and maybe they will kindle some notions about your own plot.

Please don't forget to grow plenty of herbs. Save a corner of your garden or devote your whole plot to these flavorful, aromatic plants. They'll welcome your every visit with fragrance and the promise of savory meals. We have an herb demonstration garden where you can get some ideas and, perhaps if no one is observing, you can pinch off a leaf and rub it under your nose. We hope it makes you smile.

¹ Excerpt: The Poor Man's Garden, Mary Howitt, (1799-1888)

Structures in your garden

You can be a perfectly happy and successful gardener with nothing but plants present in your garden plot. Tomatoes are contented to sprawl on the ground, and in many commercial situations, that's just what they do. However, many people feel their plantings benefit from some type of supporting structure. A tomato plant elevated with a cage is less prone to damage, and it's easier for you to see and pick the fruit. Pole beans and peas, of course, profit greatly from supports. Some of our gardeners cage their eggplants to protect them from heavy rain and wind, and tall flowers can use something to keep them upright for the same reason.

Besides props for your plants, you may also want to add some type of fencing in or around your plot. Again, this is not necessary, but many of our gardeners do it. Zucchini and other types of squash know no natural boundaries and grow over your paths, the Garden paths, and just about anywhere they please. A little fencing will keep these vegetable opportunists in check and the Garden's path maintenance crew off of your back.

So, what materials are available for support and control in your garden? Look around at other garden plots and you'll see about as many ways and means as there are gardeners. Bamboo stakes are always popular and inexpensive. They work well for supporting flowers and small vegetables. Bamboo fencing is sold just about everywhere these days, but it isn't cheap. With a little ingenuity you can make your own with some bamboo and string or wire. For larger plants, you might want something more stout. Metal cages for tomatoes come in many varieties, from weak and mostly useless, to heavy duty and strong enough to support 8-foot, fruit-laden vines. Homemade cylindrical cages made from concrete reinforcing mesh are some of the strongest supports, but here too you can use many different shapes and materials. Wooden 2x2's make a very functional and versatile plant support material.

It doesn't hurt to experiment with different structures and materials, but try to avoid things that look like they just arrived from the rubbish heap. Stay away from curtain rods, rotten nail-filled 2x4's, rusty wire, old ski poles, and anything that doesn't belong in the public eye. Speaking of the "public eye," if you have pointy metal or wooden stakes in or around your garden, cover the ends in a way that will protect people from becoming accidentally skewered.

Make sure you don't totally enclose your garden plot without leaving an entrance. Coordinators need to enter plots for weed and plot survey and occasionally to look for lost tools.

Grow your own

Experienced gardeners know that you get out of your garden what you put into it. Don't expect a truly bountiful harvest if you can't devote plenty of time to your garden plot. Try to attend to your plot at least once a week, if not more, during the summer months. Every couple days may be best if you grow things like zucchini that can sometimes grow six inches in a day.

If the weather is uncooperative, keep an eye on the soil moisture. Seeds and new plantings must be kept moist or they will die. At the very least, they will start life stunted and never approach their full potential. In the summer, the soil can dry very quickly, so water more. Do mulch your plants. For new gardeners, mulch is a soil covering that keeps the soil moisture and temperature stable. It can slow the invasion of bacteria and keep some insect pests from your plants. Materials such as straw, grass clippings, leaves, shredded bark and bark nuggets, wood mulch, plastic sheeting, and newsprint are used as mulch. If you use sheet plastic or newsprint, cover them so that they do not blow away. Stay away from rubber mulch and carpeting.

Dowling Community Garden gets deliveries of wood mulch, composted horse manure, and black urban leaf compost. Deliveries are made to the north section of woods adjoining the Garden. Do use these materials in your garden. The composted horse manure and the black compost will help your plants enormously and improve the quality of the soil in your plot. The horse manure can be added to your soil anytime, but some gardeners believe that the fall is the best time. It will break down slowly during the off season and provide you with a nice friable, fertile soil in the spring, but you can "top dress" your plants anytime. Top dressing, putting a few inches of material around the base of you plants, works with the black compost as well. It will also help to minimize weed growth. The wood chips make good mulch, keeping weeds down and easy to pull, but using them as mulch can make working the soil around your plants difficult. They serve really well as a path material in your plot.

Although the horse manure and compost act as fertilizers, they may not be enough for some of your plants. Tomatoes (once they've started blooming) and cole crops such as broccoli and brussels sprouts are heavy feeders. For the best and biggest harvest from these vegetables, the experienced gardener turns to a stronger fertilizer. Don't go overboard, but fertilizers targeted to these plants can be very helpful, especially if you tend to plant the same vegetables in the same spots year after year.

Some fertilizer dos and don'ts

- Do read the directions on fertilizer containers and follow them closely.
- Don't leave fertilizer containers in your garden—ever.
- Do water after fertilizing so that the fertilizer doesn't burn your plants or wash away in the next big rain.
- Don't overfertilize; less is better.
- Don't "pig out" on the horse manure or black compost. We buy these as a shared resource and quantities are sometimes limited; leave some for your 200 Dowling neighbors.
- Do bring clean leaves (no dog residue) to your garden for mulch and soil amendment.
- Generally, root crops (potatoes, carrots, horseradish) don't react well to high-nitrogen fertilizers. It spurs top growth at the expense of root growth.
- Some flowers prefer poor soil.
- If you use straw for mulch, buy it from a reputable dealer. Hay and straw can occasionally contain herbicide residues, leading to disaster in your garden.
- Do some research on fertilizers. Ask around the Garden and visit the library.
- Do water; without soil moisture, the richest soil in the world will be ineffective.
- Use only composted manures in your garden. Uncomposted manures can harbor harmful bacteria and sometimes veterinary antibiotics can be present. Both of these products are broken down by thorough composting.

An accelerated calendar—spring

In the spring, you will be busy preparing your soil and planting seeds and seedlings. As in painting a room, preparation is the key, so plan on spending some time getting your plot ready. Remove any debris and dead plants that you may have missed from the previous year. Look for your plot address brick; make sure it's visible from the garden path and stays that way. If your soil is very loose with a lot of organic matter, you'll probably be ready to start planting. If your soil is compacted or looks poor, get some compost mixed into the planting areas. Level out these areas with a rake so that water doesn't puddle and drown your plants, or leave them dry. Consider your plot in relation to the sun. Where will you put your tallest plants? Who needs the most light? Which ones need shade?

Remember—your plot must be at least half planted by May 31.

If you don't already have seeds and seedlings ready to go, now is the time to find some. Nowadays this isn't a problem. Garden centers, big box stores, supermarkets, co-ops, plant sales, and mail-order suppliers all have something for your garden. Dowling Garden generally holds a plant sale in the spring with lots of variety, especially for tomato enthusiasts. An appendix at the end of this handbook lists some of the suppliers our gardeners use.

You can plant seeds before the last frost, but make sure any seedlings that go out are hardy. Be prepared to cover them if the weather turns against you. Lettuces, spinach, peas, Swiss chard, cole crops (collards and broccoli), and root vegetables will handle some cold pretty well. It's better to be conservative about tomato planting, although there is always an undercurrent of competition to see who brings in the first tomato.

An accelerated calendar—summer

After the first heady successes of spring—and the first miserable failures, summer arrives and it looks like you're home free. If you're lucky, and what farmer doesn't rely on luck, most of your plants are healthy and vigorous. Sit on a park bench and enjoy the sun, schmooze with other gardeners. Walk around the Garden paths and look at other gardens. Daydream about what to do with all of your tomatoes. Then get back to your plot and mulch under your veggies. Pull some weeds. Water your flowers, it's getting warmer now, and pick a few for home.

After the excitement of spring and early summer, when the weather starts to get hot, gardeners' attention wanders and their gardens suffer. Stick it out! Your plants need attention now, so don't waste all of your spring labor. Come down to the Garden and water your vegetables. If you have a surplus of veggies, and even if you don't, harvest some and bring them over to the food shelf drop-off at the shed. Weed around your plants and trim them back if they're overflowing the Garden paths. Pull diseased leaves and plants and discard them in the trash. The better your plot looks, the more interest you'll have in it. The more interest you have, the better your harvest will be. Late summer is a good time to plant some fall crops, more broccoli, more lettuce, and more spinach.

An accelerated calendar—autumn

It's the beginning of the end of the season, but your vegetables and flowers don't know it yet. They still exist in a marvelous vision of hot days and warm nights. This, of course, will end soon. The nights will start cooling down and warm-weather plants, like tomatoes and okra, will stop producing. Don't give up on anything yet. Even if plants stop setting fruit, the existing fruit need to mature. Continue to water, but let up on the fertilizer.

Plotholders, if you haven't fulfilled your service requirement, contact your coordinator or check the shed kiosk for general tasks. **All service time should be completed by November 15.**

When the temperature begins to drop in earnest, it'll be time to thin the herd. Annual flowers have had their day; start clearing them out, but save the seeds from the ones you enjoyed and use them next year. Some perennials are still in flower, so other than cleaning them up a bit, you can leave them be till the very end of the season. Tomatoes that no longer bear can be yanked from the ground. Dispose of the greenery from these, and add some compost to the resultant hole. That spot will be ready to plant in the spring.

Zucchini have probably had enough by now, but have you had enough zucchini? Probably not. Whatever, pull the plants and add compost to the hole. Pumpkins are pretty much done, but they look so grand in their patch that it's a shame to remove them. Pull anything else that looks dead.

Remember—your plot must be cleaned up and put to bed by November 1.

Some things can be left in the ground over the winter. Dinosaur and Russian kale, leeks, rutabaga, parsnips, and carrots can be left in the soil until it freezes. Root crops like parsnips, carrots, and rutabaga can be left in the early winter ground for storage, but you'll have a hard time finding them under the snow. Cover them with a thick layer of straw for a short-term solution. Spinach, onions, newly planted garlic, and perennial flowers can be mulched with good results.

Remove all dead vegetation by November 1. Also, take down any structures that are not permanent and bundle them in the middle of your plot, staking them down if they tend to roll or move about.

Appendix

Gardening resources

For some gardeners, part of the fun of gardening is growing varieties of plants that aren't available in local markets or nurseries. The World Wide Web offers a wealth of information and products. If you're in search of seeds or starts of unusual varieties of vegetables, herbs, and flowers, you may want to check out these sites:

- Seed Savers Exchange, <http://www.seedsavers.org/>
- Sand Hill Preservation Center, <http://www.sandhillpreservation.com/>
- Victory Seed Company, <http://www.victoryseeds.com/>
- Seeds from Italy, <http://www.growitalian.com/>
- Tomato Growers Supply Company, <http://www.tomatogrowers.com/>
- Kitazawa Seed Company, <http://www.kitazawaseed.com/>
- Fedco Seeds, <http://www.fedcoseeds.com/>
- Johnny's Selected Seeds, <http://www.johnnyseeds.com/>
- Select Seeds, <http://www.selectseeds.com/>
- Thompson & Morgan, <http://www.tmseeds.com/>
- Richters Herbs, <http://www.herbs.com/>
- Ronniger Potato Farm, <http://www.ronnigers.com/>
- Dixondale Farms, <http://www.dixondalefarms.com/>

Some useful books

There are tens of thousands of books about gardening and thousands about vegetable gardening in particular. Since there is no practical way to list all of them; here are a just few that you may find interesting, in no particular order.

- Rodale's Ultimate Encyclopedia of Organic Gardening – Edited by Fern Marshall Bradley, Barbara W. Ellis, and Ellen Phillips, Rodale Publishing
- Seed Sowing and Saving: Step-by-Step Techniques for Collecting and Growing More Than 100 Vegetables, Flowers, and Herbs – Carole B. Turner, Storey Communications
- 100 Heirloom Tomatoes for the American Garden – Carolyn J. Male, Workman

- The Heirloom Tomato: From Garden to Table: Recipes, Portraits, and History of the World's Most Beautiful Fruit – Amy Goldman
- Discovering Annuals (Paperback) – Graham Rice (This is the one with the lovely color & texture combos)
- 100 Vegetables and Where They Came From – William Woys Weaver and Signe Sundberg-Hall
- Four-Season Harvest: Organic Vegetables from Your Home Garden All Year Long (Paperback) – Eliot Coleman (Author), Barbara Damrosch (Author), Kathy Bray (Illustrator)
- Encyclopedia of Perennials (American Horticultural Society) (Hardcover) – Graham Rice (Author), Kurt Bluemel (Editor)
- Taylor's Guide to Heirloom Vegetables: A Complete Guide to the Best Historic and Ethnic Varieties (Taylor's Weekend Gardening Guides) - Benjamin A Watson
- Taylor's Guide to Annuals (Taylor's Gardening Guides) – Gordon P. Dewolf
- Taylor's Guide to Perennials (Taylor's Gardening Guides) – Gordon P. Dewolf
- Taylor's Guide to Bulbs (Taylor's Gardening Guides) – Gordon P. Dewolf
- The Edible Heirloom Garden (Edible Garden) – Rosalind Creasy
- Taylor's Guide to Herbs: A Fully Illustrated Encyclopedia of More Than 400 Useful, Interesting, and Ornamental Herbs (Taylor's Gardening Guides) – Rita Buchanan
- The Compleat Squash: A Passionate Grower's Guide to Pumpkins, Squashes, and Gourds – Amy Goldman and Victor Schrager
- Melons for the Passionate Grower – Amy Goldman and Victor Schrager