

THE SEEDLING

*The Newsletter of Burnaby and Region Allotment Garden Association
BARAGA, Volume 27, Number 4, December 2008*

Annual General Meeting

BARAGA's Annual General Meeting will be held on January 10th, 2009 at 1:00 P.M. As usual the Lions Club Hall at 5024 Rumble Street, Burnaby is reserved for the occasion. The agenda will include reports on the condition of the garden, consideration of the proposed 2009 budget and election of Directors.

Membership renewals (including sign up for volunteer tasks) can be processed before the meeting begins (approx. 12:00 to 12:55 P.M.).

Members paying their dues should be sure to bring their renewal form with them. This includes all the details of previous rental and volunteer assignment. The easy way is to sign the form, include a cheque payable to BARAGA for next year's rental and use the envelope provided.

As usual there will door prizes and refreshments. This is the ideal opportunity for members to get

information about BARAGA and how it is run; it is also a time to input your ideas.

Elections for the four executive positions (President, Vice-president, Treasurer and Secretary) and for Directors (number to be determined by motion) will be held. Members are invited to submit written nominations for these positions. You may nominate any member in good standing (providing you have their permission); you may also nominate yourself. Nominations will also be accepted at the meeting. Organizations always need new blood and there may well be vacancies to be filled.

**Send in your nomination:
members are encouraged to
submit their nominations to
Camilla Dietrich by mail to
214 - 67 Miner Street, New
Westminster BC V3L 5N5 or by
email to dietrich@sfu.ca**

Board News and Views

Renewal notices: by now the renewal notice (with the other salient details) should be in members mailboxes. Your membership renewal and plot rental fee must be received by January 31st, 2009.

Please remember to sign the form. Check the details of your address, telephone number and email and make sure they are accurate. Please use the envelope provided for your return. If you are attending the AGM you can drop it off there provided you arrive early.

Vigilance: BARAGA recently experienced a serious case of theft. While apparently unpreventable, it is another reminder to us that there is some security in knowing our neighbours and challenging strangers. Please don't confront them; just introduce yourself and be satisfied they have legitimate business at the garden.

Water: the water used at the gardens does not come free - or cheap! It is one of the biggest items of our expenses. While with winter rains and our provinces bountiful supply of water, it may seem foolish to mention this item, water is valuable and essential, so please think about your use - when it gets turned back on.

Testing the Garden Soil

Before a new season of gardening gets underway we decided to evaluate what we had. In particular we wanted to know about the soil. So we bought one of the soil testing kits that are readily available in nurseries.

It consists of four test tubes (actually little boxes with lids), four colour keys, four packages of capsules containing chemicals, and instructions. The four tests are respectively for nitrogen, phosphorus, potash, and acidity/alkalinity. The colour keys evaluate the results. The instructions even include some recommendations for possible soil amendments.

The first step was to get soil to test. Since there were plenty of testing capsules, we decided to test soil from the allotments of a couple of friends. They were chosen from different parts of BARAGA, but it seems to make little difference. From each location we took four or five teaspoons of soil (from about four inches depth) from random beds. To establish some perspective we also took a sample from a bare peat area that has had little or no cultivation.

To test, water was added (5:1 ratio) to the soil. There was an immediate difference. The control sample was obviously nearly all peat and the dry part was hard to mix. The other three samples all showed additional material - the results of soil amendments over the

years. The contents of a capsule was added to the measured samples in each test tube and shaken well. After about ten minutes the colour results were read and recorded. Here are the results:

	Plot A	Plot B	Plot C	Park
Nitro- gen	N 4	N 0-1	N 1-2	N 1
Phosp horus	P 2	P 2-3	P 2	P 0-1
Pot- ash	K 2-3	K 3	K 2-3	K 0-1
Ph level	6.0	7.0	7.0	5.5- 6.0

What the fertilizer numbers mean:

4=Surplus, 3=Sufficient, 2=Adequate,
1=Deficient, 0=Depleted.



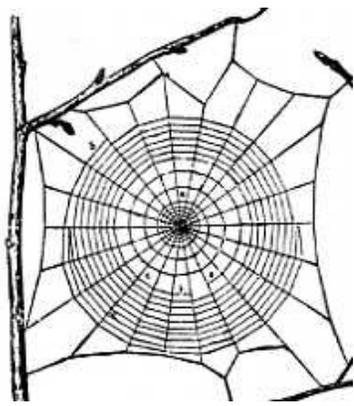
Park Test: (see column 4) this is exactly what was expected. Peat is known to be acid and the ph level here was below 6.0. Levels of nitrogen, phosphorus and potash were all very low. Without considerable amendment this soil will not grow abundant crops.

Plot A: while the nitrogen level is good, some type of fertilizer is called for to raise the level of the phosphorus and potash. Since no lime had been applied by the gardener on this plot for two years, acidity was high and this allotment will need to be limed in early spring.

Plot B: this plot has only had organic compost and manure added for many years. Only the level of nitrogen was a little low, otherwise this was fertile soil with a balanced Ph.

Plot C: both organic and chemical fertilizer were used here over the years. Except for the higher nitrogen reading, the result is similar to plot B. Since both phosphorus and potash tend to linger longer than nitrogen, this is another predictable result.

There is an easy and obvious conclusion: allotments need to be both fertilized and limed to increase soil fertility and to create a more suitable ph level for growing vegetables. However individual allotments will differ quite a bit depending on their care over time. Gardeners might well want to do their own test to determine exactly what their own soil requirements are.



Do You Have Spiders?

Every allotment will have some spiders. The purpose of this article is to

encourage gardeners to have as many as possible. But first, let's take a look at what spiders are and what they do.

Spiders are not insects, although their size and appearance might indicate a relationship. Both have external skeletons. But, they differ in several significant ways; insects have three parts: head, thorax and abdomen, spiders combine the head and thorax into one cephalothorax. Spiders have eight legs, insects only six. Insects develop in a complex life cycle, sometimes only becoming mature for a few days before dying; spiders hatch from eggs as spiderlings, tiny objects but otherwise resembling their parents; they grow larger, to adult size, by several molts of their external skeleton. Each molt sheds the hard protective outer layer making the spider a very vulnerable blob of immobile tissue until the new skeleton hardens.

All spiders share some unique features. They are all predators using their jaws known as chelicerae to subdue prey. Most spiders have venom which is

introduced by movable fangs on the jaws. Spiders have simple eyes (usually eight) which gives them only limited vision. Their eight legs have tiny hairs with extraordinary sensitivity to touch and movement, making touch their primary sense. The legs have three claws which are useful for grasping prey and clinging to almost any type of surface. Essential organs like heart, digestive tract and reproductive organs are located in the abdomen. The abdomen also has spinnerets (2,4, or 6) which produce the silk that makes the webs.

There are about 35,000 described species of spiders, but undoubtedly many more are awaiting description. Some have bodies measuring as much as three inches, but most are much smaller and many are quite minuscule. Many spiders are very shy and secretive, relying on their invisibility as a primary means of defence. When both their size and ability to hide is considered, it should be less surprising to learn that an average acre of land will have a population of a million spiders (that's a scientist's calculation, not a count).

Spiders fall about midway in the food chain. Lots of creatures (birds, ants, reptiles, even mammals including humans and especially other spiders) are glad to eat spiders. In turn some spiders subdue and eat birds, snakes, and small mammals. But spiders chief source of prey are the insects. It is calculated that in England the weight of the insects eaten

by spiders each year is more than the combined weight of the human population. That's an huge amount of insects. In the rice fields of China where spiders are encouraged they devour up to 90% of the rice pests.

While garden books often extol the virtues of insects like ladybird beetles and green lacewings in controlling garden pests, spiders out-perform them quite handily. Of course spiders prey quite indiscriminately; bees, wasps, moths, butterflies, beetles, bugs, almost anything that falls into their traps are captured and sucked dry.

Why do many of us, humans, have such an aversion for these obvious allies against the insect population? Part of it is an old cultural one that tends to be overblown in the silly, sensational stuff from Hollywood that feeds on arachnophobia. Although most spiders have venom it is used to subdue prey and for defence. However, the black widow whose territory in North America coincides with wine growing country is notorious. Black widows were attracted to privies (biffies, outhouses) which also attract numerous insects. For obvious reasons many black widow spider bites were on the male anatomy. It is a very painful bite and the venom spreads to the whole body sometimes resulting in death. But spiders do not often bite humans; as many as 80% of the bites attributed to spiders are caused by other means, usually insects. There is a visible

difference; spider bites always have two punctures caused by the fangs closing; insect stings cause only one.

Some cultures favour spiders. The Chinese rice farmers build them straw houses for protection in winter. The Poles and other Europeans have a tradition of protecting spiders. In England there is a proverb: "If you wish to live and thrive, let the spider run alive." Gardeners should take much the same attitude; let your spiders alone and let them thrive. Instead of completely clearing the ground to bare earth in fall as some older sources advised, if plants are allowed to slowly decompose, particularly if perennials are left in place, spiders will find winter refuge and be in place to deal with spring pests (spiders have an average lifespan of 12-24 months). A layer of leaf mulch can accomplish the same thing, protecting the spiders and protecting the soil from leeching its nutrients and turning acidic when the rains begin.



The tarantula, a large, dark-coloured, hairy spider found a thousand miles to our south.

How Much Can You Grow?

According to one garden authority, Rodale Press, a 200 square foot plot can grow 400 pounds of produce in a year if intensively cultivated. BARAGA allotments are one thousand square feet. With a generous allowance for the flower border, a compost bin and a storage shed, there should still be 800 square feet left to grow produce. That would mean that each allotment has the potential to yield a crop of 1,600 pounds.

While this is an astonishing amount of food, let's look closely at how it is done. Firstly our authority is assuming that the garden will be fully planted for all of the growing year. That means that the first crops will be in the ground at the end of February-early March. There will still be crops growing until mid-November by which time the daylight is too limited and the weather too cool to permit much active growth. In between three crops or even more will have been planted, grown and harvested. The first rotation will be of crops like peas, chinese cabbage, lettuce, swiss chard - all crops that flourish in cool weather. Heat loving crops, such as cucumbers, tomatoes, peppers, eggplants, squash, will take over the ground in summer. The late summer/fall planting will be of leeks, kale, brussels sprouts, cabbage, spinach - crops that will persist well after the onset of cold weather.

Our ambitious authority is also pushing the envelope by using tunnels or cloches to produce a greenhouse effect and extend the growing period as much as possible. Ground heated by the sun stimulates plants protected from the full force of the cold wind, hastening growth and maturity.

In order to shorten turnover time, one crop follows another in quick succession. As soon as the first crop is harvested, the ground is given to a new crop, in many instances to seedlings that were already well underway and are popped into the ground to ensure continuous productivity.

There is an obvious relationship between time/effort and productivity; the more care and attention that goes into the garden the more it produces. If the available ground is used to its maximum productive capacity, if the growing season is extended to its limits, if the soil is maintained at a high level of fertility, and if gardener can devote enough time, a huge yield can be expected from even a small plot of land.

Of course, quantity is not the only thing to consider. There is need and quality to add to the equation.

Need: if 800 square feet of an allotment is devoted to producing edibles, at a pound of produce per square foot (half the amount arguably possible with intense cultivation) the total yield would be at least 800 pounds. That is still a lot of food, probably as much or

more, than a family of four can eat. Let us say that the average price of produce is one dollar a pound. That means that an allotment can easily produce food to the value of \$800. Even when the full cost of rental is added to the other investments (seed, tools, fertilizer, etc.) there should be a tidy margin of profit. The more the allotment produces the bigger the margin.

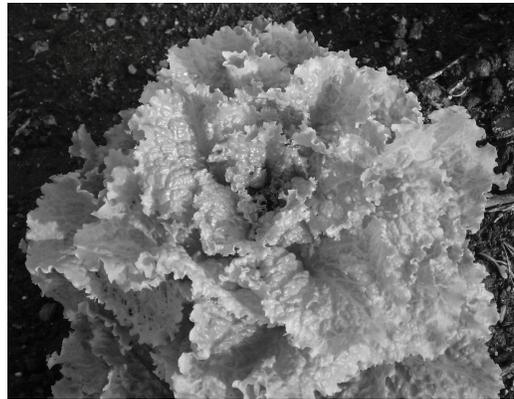
Quality: not many of us are likely to fault the quality of what we grow. We have complete control over growth from seedling to harvest, we can select the best tasting varieties, within the climate's limits we can harvest whenever we choose. We can eat what we pick the same day; no need to sift through produce long past its "use by" day. But quality and quantity do not always coincide; for instance the older tomato varieties (Krim, Brandywine, for example) are of excellent taste, but do not produce the same large crop as newer hybrids.

There are other ways we can enhance value of our allotments. In a straight forward comparison based on what the stores charge; for instance onions, potatoes, and carrots are about fifty cents per pound; tomatoes, eggplants, peppers often cost well over a dollar; peas and beans were two dollars a pound this summer. Obviously peas are much more valuable crop than potatoes based on pure financial considerations.

While ordinary vegetables can be grown and enjoyed with ease, the allotment gardener has the opportunity to

grow quite exotic crops, special ingredients required for ethnic cuisines, unusual varieties that rarely if ever appear on supermarket shelves, delicate produce that cannot make the long journey to market. Tucked away in corners throughout the garden we can grow the herbs and some of the spices that delight our palates.

All too often allotments are sparsely planted and sporadically tended, sometimes areas are left bare and unplanted, and weeds are allowed to grow and steal valuable nutrients from sickly vegetables. This is a shame, for besides an escape to nature and an outdoors experience, allotments offer a potential for real value - an opportunity to save a bundle. This is an opportunity many gardeners already take, but one which should be grabbed by many more.



Black Seeded Simpson - a lettuce with a long history and great popularity. It was a favourite with Jim Crockett, once the host of Victory Garden on PBS. It is not a hybrid but open pollinated so comes true from seeds you save.

More Inspiration for the Gardener's Soul

from Christian Rumpf

- ◆ Gardening requires a lot of water and some of it in the form of perspiration.
- ◆ From the earth we were formed, and to the earth we will return, and between we garden.
- ◆ Keep a garden in your heart and perhaps the singing birds will come.
- ◆ Beyond talent for gardening lie all the usual words: discipline, love, luck, but most of all endurance.
- ◆ Flowers are words which even a babe can understand.
- ◆ Heaven is under our feet as well as over our heads.
- ◆ The day the Lord created hope was probably the same day he created spring.
- ◆ Watching something grow is good for morale. I helps you believe in life.
- ◆ Where flowers blooms, so does hope.
- ◆ Kind hearts are the garden, kind thought are the roots, kind words are the blossoms, kind deeds are the fruits.
- ◆ Man is related to plants as all living things are.
- ◆ Good gardening is very simple really, you just have to learn to think like a plant.
- ◆ Good fences make good neighbours.
- ◆ This year in the garden I learned to live with my eyes on the sky, to love the colours of the flowers, to lie belly down the green grass, this year I learned to live like a plant.

The Seedling: Editorial Policy

Included in this newsletter are items of business that all BARAGA members need to know about; there are also articles of more general interest. Newsletters increase in interest if there is a widespread input; members who can share information or have a special outlook on gardens, gardening, or any other topic common to BARAGA members are invited to contribute their articles. Also welcome are art work or pictures of the garden. Contact David Tamblin by phone (604-521-4318) or email (d_tamblin@telus.net). Views expressed in this newsletter are not necessarily those of BARAGA.

Purslane: a healthy weed

One weed that returns yearly in the warmth of summer on rich soil is purslane. A good way to dispose of it may be to eat it.

“Purslane may be a common plant, but it is uncommonly good for you. It tops the list of plants high in vitamin E and an essential omega-3 fatty acid called alpha-linolenic acid (ALA). Purslane provides six times more vitamin E than spinach and seventimes more beta carotene than carrots. It is also rich in vitamin C, magnesium, riboflavin, potassium, and phosphorus.”

- www.motherearthnews.com/Organic-Gardening/2005-04-01/Power-packed-Purslane.aspx