

THE PLEASURES OF THE POTAGER

A one-day workshop on creating your own ornamental kitchen garden
Sunday September 8th 2013
at Abbondanza Greenhouse and Gardens, 14 Pruniers, Potton, Quebec
Workshop Director: Gwynne Basen

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About Gwynne Basen

Abbondanza Greenhouse and Gardens occupies the site of a 148 acre historic hill farm first settled over a hundred years ago. For the last thirteen years the stewardship of the land has been in the hands of Gwynne Basen, an award winning film maker, writer, gardener and activist.

On the old fields and pastures Gwynne has been gently shaping a new landscape building gardens, orchards, planting trees and growing a wide range of mostly heirloom plants both edible and ornamental.

She has also constructed a passive solar heated greenhouse where she starts her seedlings in the spring and then grows tender food crops all summer, extending the growing season at both ends.

Gwynne's agricultural/horticultural practice has always been guided by her activist commitment to strengthening and protecting agricultural biodiversity, creating a safe, sustainable and equitable food system and bringing beauty into the world.

She is one of the founding members of both the Mansonville Farmers Market and La Locomotive Coopérative de Solidarité which were created with the goal of building a strong local food system in the community where she lives.

In 2012 Gwynne held her first workshop at Abbondanza, as the first step towards establishing an education centre where participants could both learn the practical skills required to produce their own food, create beautiful, productive gardens and establish a more connected, engaged and sustainable relationship to the natural world.

You can find more details of Gwynne's career, interests and activities as well as information on the development of Abbondanza at the website:

http://www.web.net/~memphis/Abbondanza/-_Home_Abbondanza.html

Objectives of the Workshop

- Choosing plants and plant varieties for their beauty and flavour.
- Planning your beds or planters for all season production.
- Techniques for building beds and pathways.
- Building the soil that plants need.
- Composting and mulching.
- Organic pest control.

The day also included a visit to the kitchen garden of Doug Ernst

Morning session – Creation of a kitchen garden - Gwynne Basen

Gwynne started off the course by introducing herself and talking about how she got into gardening having had quite a varied career in writing and film making.

During the course of this presentation it continued to rain, so we went over to the barn where Gwynne described how she created her kitchen garden that combines edible and ornamental plants. The topics she covered were primarily on

- Choosing plants and plant varieties for their beauty and flavour.
- Planning your beds or planters for all season production.
- Techniques for building beds and pathways.

Fortunately the rain had tapered off by about 11am and we spent an hour in her kitchen garden which is surrounded by a high fence with deer netting to prevent deer and other large mammals from getting in, and which has a large barn as a border on the west side. She talked about the pairing of vegetables and ornamentals (mainly annuals, biennials, and perennials) and I now have a list of plants that she uses in her garden many of which will re-seed themselves year after year which I can consider for my own garden. She has also provided a list of filler plants. The plants in the various garden beds which caught my eye included:

- Annabelle Hydrangea (*Hydrangea arborescens* 'Annabelle') with round blooms which she cuts down every spring to ground level
- Ornamental Italian Kale (*Brassica oleracea* Acephala Group) which she grows from seed every year
- Common rue (*Ruta graveolens*)
- Runner beans (*Phaseolus coccineus*)
- Biennale Angelica (*Angelica archangelica*)
- Love Lies Bleeding or Amaranth (*Amaranthus caudatus*)
- Jamaican Cucumber (*Cucumis anguria*) which is a vine that she allows to grow along the deer netting of her fence.
- Cucumber Magnolia tree (*Magnolia acuminata*) which is actually a zone 5 tree, and seems to be thriving in a protected area of her closed garden even it is a technically a zone 4 area
- Berberis Red Leaf (*Berberis ottowensis* x *Auricomia*) which can be used as a hedging plant
- Vervain – *Verbena bonariensis*
- Apple of Peru and shoo-fly plant (*Nicandra physalodes*)
- Egyptian Onion or Tree onion, (*Allium xproliferum*)
- Common sorrel or garden sorrel (*Rumex acetosa*)
- Bloodroot (*Sanguinaria Canadensis*) - a shade plant
- Leek (*Allium porrum*) which is a biennial and has a decorative allium type head in its second year.
- Ornamental corn
- Garlic chives with white flowers
- Biennial thistles which can be used as an ornamental focus and grow to about 5-6 ft in height
- Dianthus and thyme also serve as good edging plants and they were available in profusion in Gwynne's Garden enclosure.

Of course, many of the plants listed above are not native to North America, but many go very well as pairs. What is also very interesting is that apart from a few exceptions, the garden is basically stripped of plants in the late fall, so that everything starts almost from scratch for each gardening season.

What I particularly liked about her enclosed garden were the raised beds edged with old bricks and the narrow pathways between the individual beds. It was difficult to get an overall picture of the contents of her garden without walking around and there always seemed to be a surprise waiting for you when you went from one bed to the next. She provided us with a

detailed list of seed catalogs, which included the well known Seeds of Diversity (www.seeds.ca) and Kokopelli – an organization based in France (www.kokopelli-seeds.com). Needless to say, she maintains her entire garden exclusively using organic gardening techniques – but does admit to the occasional use of a Mantis Tiller - which is very light and easy to use.

Lunch break – WWOOF and tour of property

We broke for lunch at about 12:20pm by which time the weather had warmed up somewhat. The lunch had been prepared by some young people from the WWOOF organisation who help Gwynne out with her various activities free of charge except for room and board. Two were from the Toronto area, and two were from France. Information about this organization (World Wide Opportunities on Organic Farms) may be found at

<http://www.woof.ca/>

The meal was, of course, mainly vegetarian, with a some cheeses and a pâté which may or may not have been vegetarian too. The dessert was a delicious apple pie.

During this break I had the opportunity to visit her green house which is solar heated and uses pipes laid in the ground. It doubles as a hot house in summer and a seed planting area in the late winter and early spring. The interesting thing about this greenhouse is that it uses simple and inexpensive material and had masses of different varieties of tomatoes (many of which were heritage varieties).

She also has an enclosed area where she keeps ducks, chicken, and turkeys, another enclosed area for her flowering and fruit bearing shrubs and trees, and a third enclosure which she uses for experimenting with other plants, and shrubs which have captured her imagination.

And, of course, living on a farm, she has a large area in the front of her house which faces south east. In this area she has a number of island garden beds and it runs down to an attractive pond fringed with all manner of wild plants. She obviously likes massing of plants in her beds, and these she has in abundance and include several stands of hydrangea, grasses, as well as a large stand of Mexican sun flowers (*Tithonia diversifolia*) which are a very pretty orange colour. This plant is native to eastern Mexico and Central America, is paratropical and can therefore only be grown as an annual in this area of Quebec.

1st afternoon session – Building garden beds - Kathie Tweedie (a designer and gardener)

Kathie Tweedie has recently completed a certificate in "Design des jardins" at the Université de Montréal. Her practice has included many years of gardening with Gwynne and in her own city space. The focus of her talk and demonstrations was how to make beautiful, productive garden beds with absolutely no need to remove sod or dig into the ground and how you can save time and produce sumptuous vegetables and beautiful flowers. She described three different techniques for creating these beds

- how to construct a keyhole garden.
- how to structure the soil with different materials, (the lasagne technique)
- how to fertilize a hay bale so it becomes a growing medium

What was really interesting was how quickly these techniques - particularly the last two – result in very attractive results. Many of the areas Kathie showed us were prolific with plants after only about a month or so. The keyhole technique is a method adapted from a traditional African methodology – and is a bit more elaborate than the other techniques. It is a raised garden technique which requires a more detailed plan of the garden itself and is a method by which the gardener can tend to the plant from one location without having to bend down! It even has its own compost heap the nutrients from which can over time move into the soil to fertilize the plants which have been planted in it.

The keyhole technique is an intriguing one, but it does require some work to install the edging material which in the demonstration garden bed were simply 4 feet lengths of 2” by 10” hemlock planks planted vertically to a depth of about 40 cm down leaving a height of about 80cm above ground. The bed itself was a circle of about 8 feet (2 metres) in diameter with a half meter slot in the shape of a keyhole. “Lasagna” garden soil is constructed in the enclosure so that the surface is on a gentle slope down to the outer edge of the enclosure – all except for a small central area about 2 feet (0.5 metres) in diameter cordoned off for depositing plant detritus. This composter area obviously has to be watered on a regular basis so that as this material decomposes, the nutrients will percolate outward under gravity into the surrounding earth.

The basic principle of the lasagne technique is to build a bed on top of the grass or cleared ground using alternate layers of carbon substances (eg peat moss, decomposed wood branches etc.) with layers of nitrogen rich substances (green refuse from the garden, grass clippings, compost). This is an ideal technique for land which has only a very thin layer of soil covering rock or clay terrain, and is very important for Gwynne’s property because that is the basic nature of the non-forested area of her property. Another advantage, of course, is that when building a raised bed of this kind, there is no need to remove anything under it, and edging material can be easily installed without having to dig a trench (as long as it is heavy enough to remain in place.)

Collecting the material for the bed is best done in advance and is in fact the longer part of exercise. The whole demonstration of the layering process with a few willing hands took less than 15 minutes and after this is done the bed should be left to “mature” for about 2 weeks before any planting should be done. One of the beds in Gwynne’s garden had been put in place using the lasagne technique during a workshop in late June, and planting of companion plants such as cosmos and asparagus had fully developed by the time of this workshop two months later. The recipe she uses is included in the Appendix I below

The demonstration of a similar type of organic garden beds is to use straw and hay bales. These are simply laid on top of the surface of the ground and require fertilizing over a 2 week period. It is important that the bales are properly bound and placed in a correct position so that the bales do not collapse as they decompose. She uses organic materials for fertilizing the bales and the ingredients recipe and process she uses are included in Appendix II below.

Having seen the state of these bales after two months of fertilization, I am inclined to think this is more of a temporary raised garden rather than a permanent one – but obviously a very useful technique if you want to build a non-till vegetable plot very cheaply and very quickly. As you can see from the list of her ingredients, some of these may be somewhat difficult to obtain except in a thoroughly rural area such as the municipality of Potton in the Eastern Townships.

This was an extremely interesting session and I learned a lot. I certainly intend to build a lasagne garden bed of my own next year – although not, perhaps, for vegetables.

2nd Afternoon session – Building the soil that plants need - Doug Ernst - Expert wall builder

This session took place at Doug Ernst's farm at 146, Chemin White, Mansonville in an area where there are a number of farms which were probably originally established in the middle of the 19th century. Chemin White is a north-south cul-de-sac dirt road which overlooks the valley to the east with good views of Owl's Head a popular ski resort to the east and the mountains of northern Vermont to the south which includes Jay Peak another popular ski area. Mansonville is about 125 miles SE of Montreal and is the main village in the municipality of Pottton which has a population of about 1850 people in an area of about 275 sq km. So it is a very rural area.

Doug has been building stone walls and structures and planting beautiful and productive gardens at his farm in Mansonville for nearly forty years. His work reflects both his artistic nature and his deep knowledge of horticulture. He has developed a number of large garden beds most of which were developed in or around the remains and footings of old outbuildings near the farm house. In the process of this he has become an expert in building walls for his gardens, and has developed his own workshop on the basics of design, selecting and handling rocks, essential tools and materials for building your own beautiful stone walls and structures. His knowledge in the proper use of soils is as prolific as the produce of his gardens - be they perennials, biennials, annuals, and ornamentals or vegetables.

He is currently working in a number of projects to develop even more garden beds.

This was another interesting session, and he was quite amusing to listen to. He is a very practical man and has been continuously developing his garden on his own. Most of the plants he uses are annuals which re-seed, and vegetables. I was impressed with how he grows his plants in masses, and allows them to grow wherever they re-seed. In the case of vegetables, he stresses the importance of rotation of those vegetables which are susceptible to insect pests. One of his techniques is to have one or more compost piles for each garden bed which saves him the time and effort to move the stuff around.

The topics he covered in the workshop were:

- Building the soil that plants need.
- Composting and mulching.
- Organic pest control which was mainly focussing on plant rotation.

Some of the things I found particularly interesting were his techniques for developing soil from unexpected places.

Here are my notes on the comments he made on various topics.

- a) Think of your garden, he says, as an engine for growing compost! Grow beans wherever you have the space, and, of course, clover and legumes are great for providing nitrogen fixing bacteria.
- b) He sets up one or more cold compost areas in each garden bed in which he can deposit old plant material to decompose and which can then be used in that particular bed when he prepares the bed for spring planting.
- c) He obtains rotten manure from local farmers – which is inexpensive because most of them are only too happy to have it removed from their own property. This type of compost is most suitable for vegetables.
- d) He has his own soil mix recipe. His basic approach in applying this to his garden beds is “Less is better than more” which means spreading it sparingly “a spoonful at a time”. The ingredients he uses are:
 - 4 parts Bone Meal fertilizer – slow release
 - 2 parts Dolomitic ground up lime stone – slow release. This can be reduced to 1 part if the pH is OK
 - 1 part Wood ash – providing potassium
 - 1 part Organic Sul-Po-Mag - from Saskatchewan – which is ground up sulphur and potassium. Appendix III below has more details on this particular ingredient.

A second application of this mixture should be applied during the 1st or 2nd week of July but replace the limestone with dehydrated sheep manure. Here you are looking for a good supply of nitrogen for flowers

- e) Ditch soil is also very good – and get some of that if you can

Some comments about particular plants

- f) Nasturtiums are very good for killing grass in your garden beds.
- g) Delphiniums – cut back to bottom of stalk after flowering is over, and then add fertilizer to get a second batch later in the season
- h) Dahlias – He loves dahlias, and plants over 1000 every season in batches of 150/week. This way they bloom at different times. Lifting them out is easy and they double very quickly. Let the stalks dry and use as a mulch.
- i) Pumpkins – Best to use rotten manure for pumpkins. Cover with plastic and beware the dreaded Striped Cucumber beetle. For this reason, he uses the following rotation system:
- Year 1 Pumpkins
 - Year 2 Ornamental corn
 - Year 3 Artichokes - I was absolutely amazed by the size of his artichokes – they were enormous and he grows them in masses in a number of beds.
- j) Nicotiana (Flowering Tobacco Plant) - This is an attractive tall plant with big leaves and white bell like flowers.
- k) Japanese Knotweed – also known as Jungle weed. Doug has a big stand of this invasive plant in his garden. It was already in place when he acquired his property and is almost impossible to eradicate. It spreads by its roots rather than by seed and he seems to have devised barriers to contain its spread beyond the current stand. The good thing about it are that it has a beautiful smell and bees and moths love it. Apparently it was also good for cows to eat after they had given birth to their calves to protect them against mastitis.
- l) Compost and mulch should be used around the trunks of trees - but keep a gap around the trunk itself.

Concluding Note

I was familiar with some of Gwynne's work from a presentation she made to the Brome Lake Garden Club in 2013. Both Gwynne's and Doug's gardens were on the Brome Lake Garden Club tour of the Mansonville area in August of this year, and I was most impressed with what I saw. The brochure for the course, attracted my interest because I have generally avoided growing vegetables and annuals since they can be a high maintenance activity with results which have rarely justified the amount of effort I have put into them.

The objectives of my gardening activities are to make my property attractive for wild life – which particularly includes birds, butterflies, bees, other beneficial insects and of course accommodates the many four-legged creatures which thrive in such an arena. I have tended to limit my garden contents to perennial ornamentals, and flowering and berry producing shrubs. I am quite prepared to use native plants although there are many attractive non-native plants that I also enjoy. I make my own compost and generally avoid the use of commercial fertilizer in my garden - which means that in many places my lawn is more broad leaf weeds than grass – but at least it is festooned with pretty flowers in the Spring!

I have an acre of property, the west side of which includes the septic system for my house, and is lined with various trees and shrubs along the lot lines. Most of the rest of this area is mainly "lawn" but there are a few islands of trees and shrubs which allow me to treat this part of my lot as two separate areas. I have wanted to add more garden beds in these for some time, and the course outline seemed to offer some practical techniques which would allow me to do so with considerably less effort and expense than bringing in a qualified landscape designer to assist me.

There were about a dozen people on the course, some of whom I know quite well, and I thoroughly enjoyed all aspects of it. I appreciated learning more about organic gardening techniques, and hopefully, in the coming season I will be able to spend some time developing more gardening beds using the lasagne technique and filling those with plants which I have generally avoided up to now.

Appendix I - LASAGNA GARDEN RECIPE

This is a recipe to construct soil above the existing ground. It is a good solution for planting where soil is poor, dry and proves difficult to grow food or flowers. It is also a solution to avoid digging up grass or digging into rocky ground.

There are many recipes for this type of soil construction. The basic principle is to alternate layers of carbon substances (eg peat moss, decomposed wood branches etc.) with layers of nitrogen rich substances (green refuse from the garden, grass clippings, compost).

Here is one recipe.

Lay down cardboard and newspaper over grass to prevent growth. Newspaper is good to use around non-rectangular areas and between the cracks in the cardboard. Water

2" decomposed wood branches or other carbon refuse. Water

2" Straw and green garden refuse. There is no problem if there are seeds in the refuse. Water

2" Peat moss. Water.

2" soil. (Fafard organic earth is one of the recommended commercial soils). Water

2" green refuse from the garden or grass cuttings. Water

2" peat moss. Water.

2" organic compost. Shrimp, algae or other organic compost. Or well-rotted animal compost. Water

2" soil. Water

Sprinkle with crushed eggshells for calcium and wood ashes for potassium. Cover with straw to prevent weeds.

Transplant seedlings directly or remove straw from soil and seed directly.

Appendix II - FERTILIZER FOR STRAW/HAY BALES

Straw = high carbon therefore break-it down with substances rich in nitrogen

Urea - chemical fertilizer 34-0-0 1 cup per bale. We did not use this.

Bat guano - bat excrement. Harvesting from caves damages ecosystems since other creatures use nutrients from excrement 10 - 3 - 1. The numbers 10 - 3 - 1 refer to nitrogen, phosphorus, potassium.

Blood meal 85% organic. 12 - 0 - 0. Non-synthetic. Problem - it is a by product of animal processing in slaughterhouses - dried blood.

Human urine 11-1- 2.5. In healthy populations urine almost always sterile.

Chicken manure. 4 - 4 - 2 (Cow and Horse 2 - 1.5 - 2.2)

SCHEDULE OF CONDITIONING THE BALES

Conditioning the bales means the bales will have decomposed far enough that the bacteria inside is activated and has begun to digest the straw, making nitrogen and other nutrients available.

The bales can be wrapped for greenhouse effect to accelerate the process.

DAY 1	3c of bat guano, blood meal or urine. Water
DAY 2	Water
DAY 3	3c of bat guano, blood meal or urine. Water
DAY 4	Water (warm)
DAY 5	3c of bat guano, blood meal or urine. Water
DAY 6	Water. Check temperature inside bale
DAY 7- 9	1 1/2 c of bat guano, blood meal or urine each day. Water
DAY 10	add 1 1/2 c of bone meal (phosphorus) and 1 1h c wood ash (potassium). Water
DAY 11-15	Let the bales decompose" Check temperature inside bale. When no longer hot, plant.

Mushrooms growing on top of the bales are a sign that bales are decomposing well. Grass growing, wash with ½ gallon vinegar to squirt of dishwashing soap to get rid of it.

Appendix III - DOUG'S MAGIC MIX INGREDIENT

Organic Sul-Po-Mag (0-0-22) also known as K-Mag NATURAL is the commercial name for the mineral otherwise known as sulfate of potash-magnesia (langbeinite). Contains 22% soluble potash, 22% sulfur and 11% magnesium. A quick release source of potassium, Sul-Po-Mag also makes a good addition to soils that lack sulfur.

DIRECTIONS FOR USE:

Broadcast 5 to 10 lbs. Sul-Po-Mag per 1,000 square feet.

K-Mag NATURAL is virtually 100% water soluble, meaning crops have access to three essential nutrients:

Potassium – Essential for protein synthesis and protein formation. It improves the flavor and color of fruits and vegetables, and promotes drought tolerance, winter hardiness, and disease and insect resistance.

Magnesium – Resides at the heart of the pigment-containing molecule, chlorophyll. As rates of photosynthesis decline, so do quality and yield.

Sulfur – Remains a key element in crop proteins. It is a requirement for nitrogen fixation in legumes and vital to vitamin synthesis in all plants, important determinants of crop quality. Without sulfur, onions, garlic and mustard would not possess their distinctive flavors.