

# **The Art of Gardening Assignment 4 – The Vegetable Garden**

## **Herbs- Food, Magic and Medicine of the Ages**

### **Introduction**

Gardening continues to experience a strong revival in modern society as we become more aware of, and concerned with, our food habits and health. Historically, a large percentage of humans were engaged in agriculture for subsistence. As nomadic peoples settled in small clan groups in a single location, foragers would have been aware of edible forest plants, brought them back to their dwellings and over the millennia, through seed selection, plants were selected and have evolved to the point where they are the basis of our current edible plantings.

There was no commercial medicine industry as we have today, so plants were used both as food, and cures for ailments. Plants also have a long history of use in religious (Christian and pagan) ceremonies.

In the midst of herbal myths and legends, surely there are glimpses of truth.

This people's knowledge was passed down through folklore, religion and culture and formed the basis of the current pharmaceutical industry.

This report will review a selection of herbs and a horticultural method believed to originate as far back as the middle ages where herb gardens arranged in the form of spirals were located within walled settlements and on castle grounds.

The herb spiral is a practical and potentially beautiful addition to one's horticultural pursuits that is currently enjoying a revival spurred on by Bill Mollison's pioneering permaculture work in Australia. The approach offers excellent use of space, (22 feet of garden bed in a 6 foot spiral) is quick and easy to build with locally available materials, and provides a rich, flexible, palette to inspire creativity applied to the shapes and patterns of the garden.

#### How to Build a herb spiral

A herb spiral can be as simple as a mound of soil with rocks set into the mound arranged from the outside to the center in a spiral pattern. The rocks, starting with the largest at the base, define the garden and provide a minimal structural support.

Gardens built in this minimalist fashion can over time lose soil and become somewhat untidy, requiring a more diligent maintenance regime. . If the simple method is used, it is recommended that plants be positioned in pots rather than directly in the soil. This will help to stabilize the structure

In order to develop a more structurally sound and longer lasting spiral, all rocks in the spiral are built up from ground level, starting from the outside with a single layer of structural material (rocks, bricks, wood) rising gradually as the spiral winds to the center. Spiral gardens can be of virtually any size with the most practical, popular, easily accessible design being approximately 6 feet wide and 2 feet tall.

Spiral gardens offer a range of microclimates that can be used to meet the different cultural needs of various plants. The dimensional nature of the garden offer a range of damp(lower) to dry (upper) areas and also sunny to shady areas depending on where in the spiral the plant is located.

The herb spiral, being primarily designed to provide aromatic herbs for cooking, is best located as near to the kitchen as is practical. It may be useful, in limited spaces to use this design approach to grow more than just herbs.

## Plants for the herb spiral

Virtually any plant can be placed in a herb spiral. The gardener needn't limit selections to herbs only and can choose the variety and quantity of each plant to meet his/her unique culinary, medicinal or fragrance desires. For the purposes of this study we have selected commonly used herbs.

They include: Watercress, Mint, Marigold, Parsley, Chamomile, Violet, Chives, Coriander, Thyme, Tarragon, Sage, Oregano and Rosemary.

Each herb will be considered for its cultural requirements and its possible medicinal, culinary or fragrance qualities.

### Watercress *Nasturtium officinale*

Watercress, an annual will grow best in the damp, shady area lower in spiral. It would do well even in a small pond built at the base. Watercress has a slightly hot tasting element that will increase if the plants are not kept cool and wet. Watercress has been used as a digestive and appetite stimulant and is a spicy addition to salads.

### Mint *Menta*

The Mint family includes various species with spearmint and peppermint being the most common. They are hardy perennials with invasive qualities that must be constrained or regularly divided. They prefer a moist, well-drained soil with partial sun. The mint family is an important commercial and household herb known for its many and varied uses (candy, gum, toothpaste, tea, jelly, skin care, sauces and vinegars.)

### Marigold *Calendula officinalis*

This annual plant, also known as Pot marigold is easy to grow and adds a rich orange/yellow glow and depth of texture to the garden. The plants prefer rich soil, full sun or partial shade and adapt well to containers. Flowering will be extended with regular deadheading. The most intense flowering will occur in the cooler parts of the growing season. Calendula blossoms can be used fresh or dry in salads, teas, pot-pourris or steamed like spinach. The flavour is mild and the plant is highly valued for the bright colour it adds to dishes.

### Parsley *Petroselinum hortense*

Parsley may be the most common herb in use worldwide and it has a rich, long history of culinary usefulness dating back to the start of the 1<sup>st</sup> millennium. Parsley is a cold-hardy biennial which will provide tasty edible leaves in the first year and the start of the second year before going to seed. Second year plants are often the first to provide a welcome fresh green in the spring. There are two varieties, Italian Flat leaved, more prized for its flavour and curled parsley, the ubiquitous garnish. While quite challenging to grow from seed due to its long germination period, once established in a rich, well-drained, soil with full sun, the plant has a vigorous growth habit and is deeply rooted. Seeds are sown indoors 10-12 weeks before the last frost for an early harvest and they can also be sown outdoors in early spring. Germination time can be reduced by soaking the seed for 24 hours prior to planting.

Parsley is rich in many vitamins (A, C iron) and well known as a cleansing herb. Parsley is an essential food item, used fresh, frozen or dried and is added to many sauces, stuffing, and soups and can be used as a tea.

Medicinally it has uses as a tonic and is considered to have generally useful health inducing traits.

### German Chamomile *Matricaria recutita*,

There are two main chamomiles, Roman and German. We are considering here the German chamomile as Roman Chamomile is primarily an ornamental plant. German Chamomile is an annual, that is best started from seed indoors. The seeds need light for germination, prefers full sun, well-drained soil, and conditions on the dry side. The plant will also self seed.

Leaves and flowers can be used fresh or dried to provide a light sweet fragrance used in teas. Fresh flowers can be added to salads. Chamomiles are seen to possess anti inflammatory and sedative properties.

### Violet *Viola*

Violets (including Pansies) are the most cheerful of garden perennials. Their colorful upturned 'faces' never fail to bring a bit of joy. A few varieties are grown as annuals and violas heartily self seed. It is my experience that one only needs to plant members of the viola family once, and they will return each year like migrating birds.

Violets prefer a well drained, rich soil in full sun or partial shade. They are easily grown from seed, or from root cuttings in the fall. Remove spent blossoms to prolong flowering and feed when flowering commences.

Violet cultivation can be traced back as far as 500 BC. Romans and greeks used the flowers for herbal remedies (laxative), wine as a sweetener and in celebrations.

Pollinators are known to frequent the violet family for sustenance.

### Chives *Allium Schoenoprasum*

Chives are a popular and common hardy perennial garden plant. Chives are hardy to Zone 3, easy to grow with mild onion flavour used in salads and cooking. They are particularly good on baked potatoes with sour cream. Chives can be started as seed or purchased in small clumps. They thrive in sun or partial shade. The chive stalks can be harvested in a 'cut and come again manner. As the season progresses, the plants will require regular feedings in order to enjoy extended harvests.

Attractive purple flower and seed heads will develop if the stems are allowed to grow to that extent. Chives can be brought in the fall for use over winter. In early fall transplant a small clump of chives into a pot (4-6 inch) and return to ground. After a killing frost, mulch or transfer pot to a cold frame for 3 months. Then pot can be brought into the house, placed in a sunny location and watered. New shoots will grow for kitchen use. Chives are a rich source of calcium, adding to tooth and nail health.

### Coriander or Cilantro *Coriandrun Sativum*

Coriander is an ancient, annual herb plant referred to in the Old Testament. Seeds have been found strewn in the burial chambers of the royalty of Egypt.

The easy to grow plants are short lived, and prefer cooler temperatures. It is advisable to direct seed every two weeks for continuous harvest. Expose the plants to full sun or part shade.

Corianders like arid environments and it is recommended that the seeds be plant directly in their final location as transplanting is quite stressful on this tender plant. At the height of summer, some shading is desirable to delay bolting. As a bonus, if allowed to will reseed itself, you will be rewarded with good coriander production year after year. If the plant is grown for seed, it may require staking as the plants can grow quite tall.

Fresh leaves (cilantro in Mexican cooking) and dried seeds (middle eastern cooking) are used to add different flavours. The plant has several different uses. It has been seen as stimulant, an aromatic and a carminative.

### Thyme *Thymus Vulgaris*

Thymes, seems to have originated in the Mediterranean area. There are many varieties with variable degrees of fragrant oils and flavours such as Lemon Thyme and Orange Thyme ,

Thymes are slow growing perennials, hardy to Zone 6. It is best started indoors, is slow to germinate but easy to grow after germination. A well drained soil , in full sun is preferred. Tops can be pinched off for culinary use also encouraging a bushier growth habit.

Thyme use goes back deep into history. It was used as a fumigant, antiseptic, anti spasmodic and was said to induce courage, bravery and chivalry. Culinary uses also abound: flavouring cheeses, liqueurs, roasted meats and poultry.

### Tarragon *Artemesia dranunculus*

Tarragon is a semi-hardy perennial and there are two main types: Russian and French. The French tarragon is the preferred plant as it's distinctive aroma is highly valued.

It is difficult to grow from seed, and a few root divisions are recommended each year to keep the plantings in a vigorous state. The plants prefer a dry soil, not too rich and in cold climates will benefit from a winter protective mulch. Some root divisions can be brought in for the winter, extending the harvest.

The leaves, used fresh, dried or frozen have a very unique anise like flavour much prized in French cooking. They are used for fish sauces, and for Tarragon Vinegar.

### Sage *Salvia officianalis*

Common garden Sage is another ancient plant originating in the Mediterranean where it still flourishes in the wild. *Salvia* means 'to heal or save' hinting at its deep medicinal history. There are several varieties and flavours that the Perennial shrub presents.

Sage will grow in a wide variety of environs, but prefers a partial shaded, warm, dry, habitat. It can be grown from seed, but the most common propagation methods are cuttings and layering. Sage grows to large bush plants requiring regular pruning. It is fortuitous that the prunings make delicious additions to one's culinary repertoire.

The medicinal history is deep, having been used as an infusion (astringent, carminative, tonic and stimulant) to assist many and varied ailments.

The culinary history is deep with primary uses in sauces and stuffings. The leaves can be used fresh, dried or frozen. My personal favorite use of sage is Sage Brown Butter sauce on Squash Ravioli, topped with crispy Sage leaves...Yummm!

Sage also has a strong record of use in spiritual ceremonies used as a cleansing 'smudge'. It is said to promote wisdom, long life, well being and prosperity.

### Greek Oregano *Oreganum heracleoticum*

One of several varieties Greek Oregano is the most flavorful and fragrant. It is a hardy perennial (Zone 5 and above) originating in Greece, requiring good drainage. The Mediterranean nature of the plant follows those that will thrive in marginal soils. Regular pruning of oregano leaving tall will assure continuous, vigorous growth

Seed starting can be challenging. Start indoors adding bottom heat and do not cover seed as light needed for germination. When ready to move outdoors( after hardening off) transplant small clumps to garden in full sun. It is best to harvest leaves before flowering for maximum flavour. Your

oregano crops are easily propagated in springtime by root division or cuttings. Oregano is a very popular herb used extensively in Greek salad, pizza and tomato sauce. It can be used fresh or dried. Recently oil of oregano has been gaining prominence in the homeopathic world as a cure for the common cold and flu.

### Rosemary *Rosamarinus officianalis*

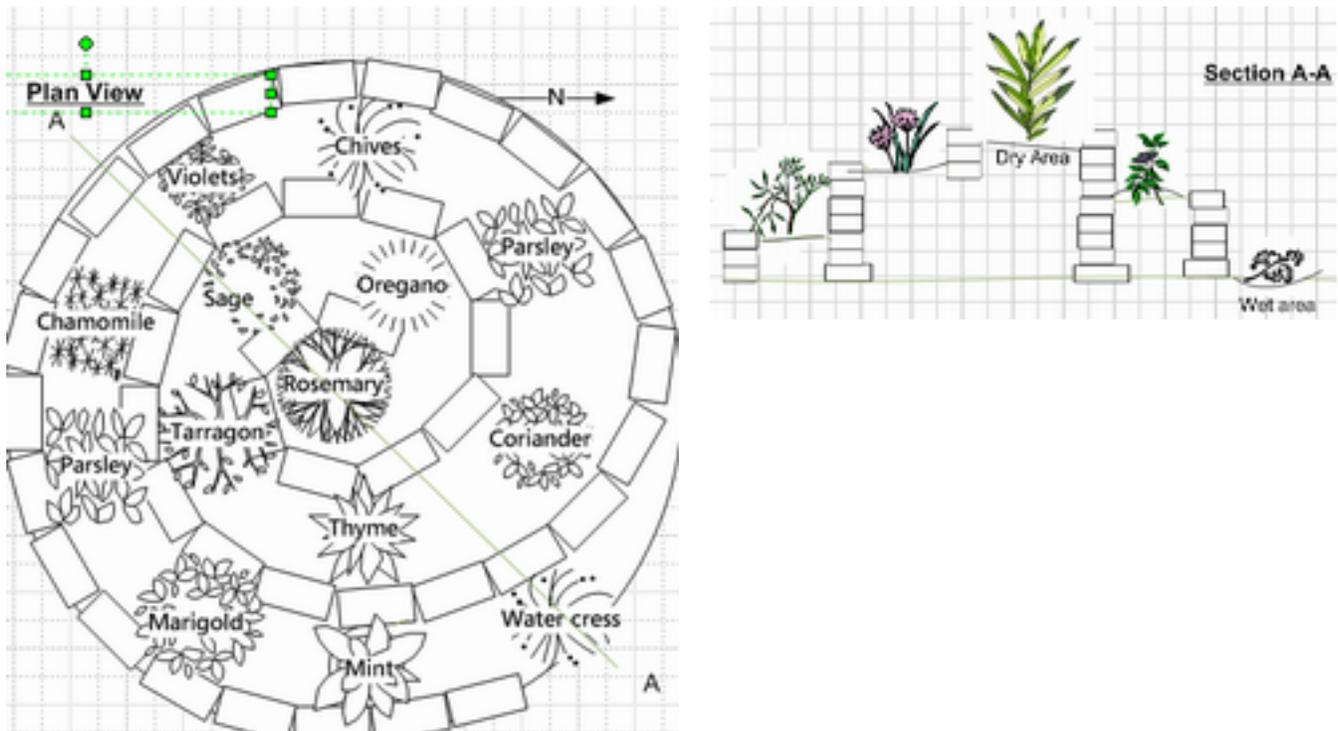
Rosemary is known as the Herb of Remembrance. In warm climate, Rosemary is a vigorous hardy perennial shrub with a very strong growth habit. In cooler climes, it is grown as an annual or brought indoors in the winter. In my personal experience, when brought indoors in the fall, the plants dried up in the arid, indoor Zone 5 Ottawa winters. It was only when discerning that perhaps success would be better if the Mediterranean climate were mimicked that a daily morning misting routine was started. Now, in the winter, the rosemary plants are misted and they now are about to survive their second winter indoors.

Start plants indoors as germination may be slow and difficult. After hardening off and transplanting into a sandy, poor soil and full sun location, a regular light harvesting can begin until the plants establish themselves

Used fresh and as a tea, it has many medicinal qualities: a tonic to improve circulation and to lower blood pressure to name two of the reported medicinal qualities. Culinary lamb, bread

It has also been indicated as having a magical propoerties with uses as a love potion, strengthening protective auras and to assist in exorcisms.

### Herb Spiral Plan



### Summary

The herb Spiral is an old and venerated shape that is now experiencing a renaissance in modern gardens. The shape

Resources:

[http://www.thebarefootcrofter.com/2010\\_04\\_01\\_archive.html](http://www.thebarefootcrofter.com/2010_04_01_archive.html)

[http://www.herbs2000.com/herbs/herbs\\_watercress.htm](http://www.herbs2000.com/herbs/herbs_watercress.htm)

the Rodale herb Book

Erbe e Cure di Frate Indovino (Italian- Monks herbal)

<http://grow-herbs.net/>

<http://www.complete-herbal.com/details/marigold.html>

[http://usagardener.com/how\\_to\\_grow\\_herbs/how\\_to\\_grow\\_cilantro.php](http://usagardener.com/how_to_grow_herbs/how_to_grow_cilantro.php)

<http://www.theflowerexpert.com/content/mostpopularflowers/morepopularflowers/violets>

Here is an alternate, even simpler way to build a herb 'modified' spiral..Octo garden



Bottom tier is 8 pieces 2\*6 (or 2\*8), 24 inches long with 22.5 degree angles cut on both ends  
Middle tier is 8 pieces 2\*6 (or 2\*8), 16 inches long with 22.5 degree angles cut on both ends  
Top tier is 8 pieces 2\*6 (or 2\*8), 8 inches long with 22.5 degree angles cut on both ends.  
Fasten with 3" screws and/or metal strapping.