

**Medicine from the Ground Up:  
An Introduction to Growing Herbs**  
Presented by Michelle de Lima,  
The Trustees Boston Community Gardens

What should you grow?

- Will you use it
- Space/conditions it needs/you have
- Readily available elsewhere (note soil and wild population considerations)
- Other benefits: pollinators, wildlife, aesthetics, etc.

Soil/Site considerations

- Lead-testing (if internal, depends of a plant part)
- Fertility/nutrients, drainage
- Containers + small spaces

General Growing Principles

- Soil care, low-till, mulch; feeding soil food web, fungi, aggregates, compost tea
- Morning water as needed
- Adequate spacing, light needs, air circulation
- Don't worry about bugs unless there is significant damage
- Crop sanitation

Annual vs. Perennial (pay attention to hardiness zone)

Propagation/seeding

- Seed germination: light, depth, temperature, timing
- Cuttings – water or rooting hormone
- Division – best done in early spring or fall

Vertical Growing

- Can save space, but vines tend to spread and need management
- Jiaogulan<sup>1</sup> (*Gynostemma pentaphyllum*), hops<sup>2</sup>, passionflower,<sup>3</sup> climbing roses

Containers

- What to use:
  - Old tubs, plastic pots, totes, glazed ceramic, terracotta, whiskey barrels - tailor to space & moisture needs
- Soil mix
  - Can tailor to water preferences- (sand, pine bark fines) (compost, clay, pot mulch)

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<sup>1</sup> Not hardy but with an early start can harvest and dry first year; some have success growing indoors in winter.

<sup>2</sup> Very hardy and huge!

<sup>3</sup> Eastern native *Passiflora incarnata* can sometimes survive the winter in a protected spot. Slow germination: soak, scarify with warm water, grow in protected spot, mulch heavily and provide sturdy, big trellis

- Drainage and fertility are important
- Store bought mix like Coast of Maine is good
- Mix: 3 parts bark fines, one-part composted Maine, touch of lime, organic fertilizer, mycorrhizal inoculant, worm castings
- Refresh and use again if no disease (remove 1/4<sup>th</sup>, add beds to compost, add compost, castings, lime)
- Protect or bring indoors if trying to overwinter plants

#### Raised Beds

- Rough cut spruce, cedar, black locust
- At least 10" depth; more for perennials
- Mulch heavily for overwinte

#### Cut and Come again

- Gotu Kola, tulsi, spilanthes, thyme, California poppy, passionflower, comfrey, basil, rosemary, chickweed, violet, sage, boneset, bee balm, meadowsweet, anise hyssop, lemon balm

#### Polyculture

- Mixing plants with different growing habits – vertical mixed with low and mid-growing, different light needs

#### Easy herbs to start with:

##### Annuals

- Tulsi – will reseed itself if allowed – direct seed or start indoors
- Calendula – will reseed sometimes, can direct seed or start indoors
- Ashwaganda - can overwinter indoors, start indoors early & warm
- Spilanthes - start indoors

##### Perennials

- Lemon balm – start with a seedling or indoors early
- Lavender - best to start with a seedling; takes long to germinate
- Thyme - start with a seedling or indoors early

#### Resources

##### Books:

- “The Organic Medicinal Herb Farmer: The Ultimate guide to providing high quality herbs on a market scale” - Melanie and Jeff Carpenter
- “Growing At-risk Medicinal Herbs” by Richo Cech
- “The Medicinal Herb Grower” by Richo Cech

Online information: Chestnut School of Herbal Medicine (but different climate), Fedco herb chart,

Plants & Seeds: Strictly Medicinals, Prairie Moon, Richters, Fedco

Bareroot plants - cheaper and fun, not hard!

*This portion of the handout was prepared & generously shared by  
Jenny Hauf, Grower and Owner, Muddy River Herbals*

## **A list of urban environments and their herbal companions**

### **URBAN NICHE: AIR CONDITIONER DRIP**

#### **PEPPERMINT**

*Mentha × piperita*

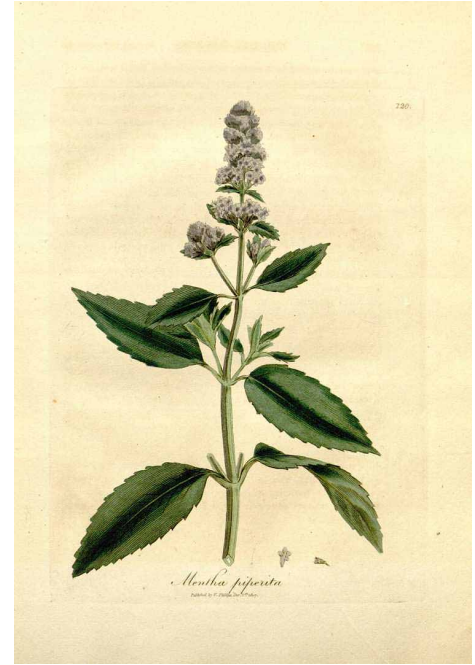
Lamiaceae

Perennial, USDA zones 3-11

Spacing: 18-24" // Height: 12-18"

Peppermint is indigenous to Europe & the Middle East. A hybrid between watermint and spearmint, it thrives in moist soils in full to part sun.

Healing uses: digestive, carminative, febrifuge.



#### **STINGING NETTLE**

*Urtica dioica*

Urtiaceae

Perennial, USDA zones 3-10

Spacing: 12" // Height: Upwards of 4'

Stinging nettle is one of the best spring tonics that we have here in New England. While it grows wild in wet soils across

Massachusetts it is also a wonderful plant to grow in the garden, provided that it is kept in a less-traveled area to avoid the pain

that it can inflict! (Its scientific name is derived from the Latin *urtica* which means "to burn," while "nettle" is from the Anglo-Saxon word for needle, *noedl*. Indeed, those tiny hairs all over the plant feel like fiery needles when they come into contact with our skin!) Plant this perennial, which grows up to four feet, in moist and fertile soil at 12 inch spacing.

Healing uses: vitamin-rich tonic, astringent, anti-inflammatory. Used to treat seasonal allergies.

#### **SKULLCAP, MAD-DOG**

*Scutellaria lateriflora*

Lamiaceae

Perennial, USDA zones 3-9

Spacing: 12" // Height: 14"

This wonderful native herb loves growing in full- to part-sun in rich wet soil. Once it is established it can be divided and spread throughout the garden. All aerial parts of this woodland perennial can be used medicinally.

Healing uses: Nervine, sedative, antispasmodic. Treats anxiety, insomnia, nerve pain, tremors.

ALSO: **SELF-HEAL** AND MORE

### **URBAN NICHE: STONE OR BRICK WALL**

#### **PASSIONFLOWER**

*Passiflora incarnata*

Passifloraceae

Perennial vine, USDA zones 6-10

Spacing: 3-6' // Height: 8'

A remarkably unique and enchanting vine, passionflower is native to southern and eastern regions of the United States. Its flowers are a hypnotizing array of sepals (protective miniature leaves), stamens (the male part of the flower), and styles (the female part). It can be grown on sunny walls as well as the south-facing side of large trees.

Healing uses: nervine, antispasmodic, sedative.

### URBAN NICHE: CHAINLINK FENCE

#### HOPS

*Humulus lupulus*

Cannabinaceae

Perennial vine, USDA zones 4-8

Spacing: 6-8' // Height: up to 30'

Hops, with their verdant leaves and cone-shaped flowers, are beautiful plants that produce strong medicine (and strong beers!). Many varieties on the market are sold only for their ornamental qualities, so do your homework before buying. A few favorites are Cascade (low bittering) and Zeus (high bittering). The more bitter the better, as far as medicine (and flavor!) goes.

Healing uses: digestive, sedative, nervine.

### URBAN NICHE: LAWN

#### DANDELION

*Taraxacum officinale*

Asteraceae

Perennial, USDA zones 3-10

One of the most common of urban herbs, dandelions are ubiquitous, turning the city yellow when their flowers fill lawns, medians, and even notches in stone walls in the month of May. Aside from providing humans with wonderful medicine, they also give much-needed spring food to bees and other pollinators.

Healing uses: bitter, diuretic, digestive. Commonly used in tonics for liver health. High in vitamins A and C, calcium and potassium.

#### SELF-HEAL

*Prunella vulgaris*

Lamiaceae

Perennial, USDA zones 4-9

Spacing: 8-12" // Height: 6-8"

Self-heal, a lovely perennial groundcover, is native to many continents including North America and grows wild in our Massachusetts woods. It is happiest in moist soils in full to part sun. Self-heal is a valued herb in Traditional Chinese Medicine (TCM).

Healing uses: antiviral, bitter, cooling, astringent.

ALSO: CLOVER, VIOLET, AND MORE.



## URBAN NICHE: URBAN MEADOW

### BORAGE

*Borago officinalis*

Boraginaceae

Annual

Spacing: 15" // Height: 3'

With its periwinkle star-shaped flowers borage is one of the prettiest herbs in the garden. It is also one of the most useful as it is edible (its flowers taste deliciously of cucumber), healing, a dynamic accumulator (meaning that it "mines" minerals from deep in the soil which become available to plants with more shallow root systems when leaves are composted or used as mulch), and provides food and shelter for a number of beneficial insects. Plant this 3' self-seeding annual in full- to part-sun at fifteen inch intervals and use its leaves and flowers fresh.

Healing uses: tonic, relieves anxiety and stress, blood cleanser, cooling, crushed leaves used in poultice for bruises and swelling, rich in potassium and calcium, stimulates adrenal glands.



### CALENDULA

*Calendula officinalis, Calendula resina*

Asteraceae

Annual

Spacing: 6-12" // Height: 18-24"

Calendula grows wild in sunny and well-drained areas throughout southern Europe. It is an incredibly cheerful and prolific herb, producing medicinally potent flowers from June until frost.

Healing uses: antiseptic, antimicrobial, antibiotic, lymphatic, cooling, anti-inflammatory, bitter.

Calendula oil and salve is helpful in the treatment of burns, cuts, and abrasions.

### CALIFORNIA POPPY

*Eschscholzia californica*

Papaveraceae

Annual

Spacing: Thin to 6" // Height: 12"

The state flower of California grows beautifully in nitrogen-rich soils and self-sows happily. All parts of this herb, from the seedpod to the bright orange taproot, can be used medicinally. A number of pollinators are wholly enamored with this poppy's blossoms including bumble bees, sweat bees, honeybees, butterflies, and hoverflies.

Healing uses: gentle nervine and sedative. Great for kids.

### CHAMOMILE, GERMAN

*Matricaria recutita*

Asteraceae

Annual

Spacing: 8-10" // Height: 15-24"

Chamomile, a European native, does best in light sandy soils. In some parts of Europe it can be found on saline steppes, meaning that it may thrive in areas polluted with road salt. Like California poppy and borage chamomile reseeds itself readily.

Healing uses: nervine, anti-inflammatory, mild sedative, bitter, antiseptic, digestive.

### LADY'S MANTLE

*Alchemilla vulgaris*

Rosaceae

Perennial, USDA zones 3-8

Spacing: 20" // Height: 18"

An exquisite plant for the edge of a border, lady's mantle can be grown in full sun or partial shade and is best suited to soil that is moist but not soggy. The soft silvery leaves are uniquely scalloped and beloved for the way in which they hold drops of dew and transform them into diamonds when caught in sunlight.

Healing uses: Aerial parts are helpful in women's reproductive health, assisting with menstrual issues (can ease excessive bleeding), morning sickness, postpartum depression, and menopausal transitions.

### LEMON BALM

*Melissa officinalis*

Lamiaceae

Perennial, USDA zones 4-9

Spacing: 12-18" // Height: 18-26"

This citrusy herb is native to the Mediterranean and does well in full sun and good, well-drained, and moist soil. It has been used throughout history for its lovely flavor, medicinal properties, and penchant for repelling evil spirits!

Healing uses: nervine, aromatic, antiviral, antimicrobial, carminative, antispasmodic. High in vitamin C. Often used in calming teas and in the treatment of cold sores (by way of a lip balm or salve).

ALSO: **HEARTSEASE, ANISE HYSSOP, AND MORE.**

URBAN NICHE: FIRE ESCAPE

### LAVENDER

*Lavandula* spp.

Lamiaceae

Perennial, USDA zones 4-9

Spacing: 2-3' // Height: 2-3'

Another Mediterranean native, this heavenly scented perennial has evolved to thrive on sunny cliff sides in sandy, well-drained soils. While it is a staple in many New England gardens it requires heavy mulching to ensure that it survives our often harsh winters.

Healing uses: sedative, digestive. Used externally in the treatment of infections and burns.



### THYME

*Thymus vulgaris*, *T. citriodorus*

Lamiaceae

Perennial, USDA zones 5-9

Spacing: 12" // Height: 12-18"

Thyme grows alongside lavender throughout the Mediterranean and does beautifully in the dry full sun landscapes described above. It is a perfect candidate for container gardening.

Healing uses: antiseptic, antimicrobial, antispasmodic, carminative, digestive. Commonly used in cough syrups and teas.

ALSO: **ALOE** (must be brought indoors from October through mid-May, or whenever temperatures are below freezing), **CATNIP, CURRY PLANT, OREGANO, BAIKAL SKULLCAP, YARROW, HOREHOUND AND MORE.**

### **URBAN NICHE: VACANT LOT**

#### **EVENING PRIMROSE**

*Oenothera biennis*

Onagraceae

Biennial

Height: 3-4' // Spacing: 12"

This beautiful and prolific plant of the urban wild is well-adapted to poor and dry soils. When dug in its first year its tender roots can be used in soup, stir-fries, or even enjoyed fresh, and its young leaves and yellow blossoms can be tossed into salads. Utilizing evening primrose in meals is the best way to enjoy this plant's medicinal properties, though it should not be eaten alone.

Healing uses: anti-inflammatory, mucilaginous, migraine relief, treatment of PMS and menopausal symptoms, liver stimulant and laxative.

ALSO: **JAPANESE KNOTWEED, CURLY DOCK, AND MORE.**

### **URBAN NICHE: COMPACTED WALKWAY**

#### **PLANTAIN**

*Plantago spp.*

Plantaginaceae

Perennial

Plantain is one of the many herbs that abound in our urban and suburban landscapes. This wonderful herb thrives in compacted soil that is challenging for plants with more sensitive root systems to survive in. Look to plantain when you need quick relief from a bee sting, mosquito bite, cut, or bruise. When using it outdoors you easily prepare it by plucking a leaf, chewing it into a paste, and slathering over the affected area.

Healing uses: astringent, demulcent, antiseptic, anti-inflammatory, mucilaginous, soothing, itch-relief.

### **WONDERFUL PLANTS TO GROW INDOORS**

#### **GOTU KOLA, CHIVES, TULSI, MINT, LEMON BALM, JASMINE**

#### **HERBS THAT TOLERATE PART SHADE (3+ hours sunlight)**

|                           |               |                                      |
|---------------------------|---------------|--------------------------------------|
| Aloe (see above)          | Comfrey       | Nettles                              |
| Anise                     | Cowslip       | Parsley                              |
| Anise Hyssop              | Elecampane    | Shisandra                            |
| Arugula                   | Feverfew      | Skullcap                             |
| Ashwagandha               | Gentian       | Sweet Woodruff (Can take full shade) |
| Borage                    | Hyssop        | Uva Ursi                             |
| Bupleurum                 | Lady's Mantle | Valerian                             |
| Chives - Regular & Garlic | Marshmallow   |                                      |
| Codonopsis                | Mints         |                                      |