Growing Culinary Herbs in Central NC





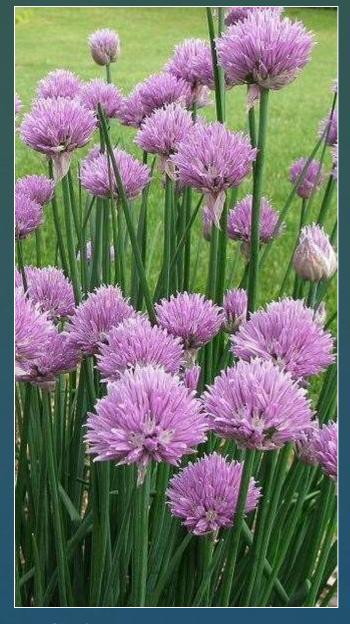
Charlotte Glen, Horticulture Agent
North Carolina Cooperative Extension
Chatham County Center

Review these slides and learn more online!

http://go.ncsu.edu/herb-resources



- Herb growing basics
 - In containers
 - In raised beds
- Tips for specific herbs
 - Annual herbs
 - Perennial herbs
- Tips from Pat
 Weisbrodt, Extension
 Master Gardener



Chives – Leaves and blossoms are edible!

Defining Culinary Herbs

- Plants used fresh or dried to enhance flavor of foods/beverages
- Typically leaves are harvested part
- Can be:
 - Annuals live only one season; replanted each year
 - Perennials live multiple years;
 may go dormant in winter but
 return from the roots in spring
 - Shrubs woody plants that live many years



The good news:

Culinary herbs are easy to grow!

- Have few pest problems
- Rarely bothered by deer or rabbits
- Require little care
- A little goes a long way!



The bad news:

- Most herbs need full sun (6 hrs+/day) and good drainage
- This is a challenge for shady yards and heavy clay soil



The good news: Culinary herbs thrive in containers!

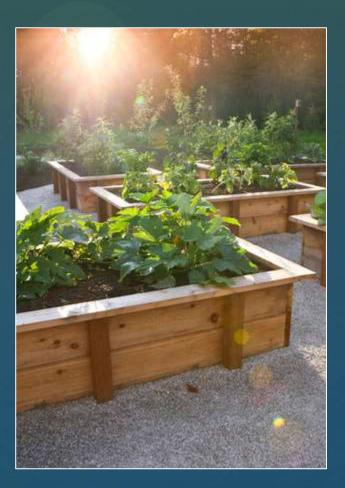
- Easily grown on a patio/deck or other sunny area
- Also thrive in raised beds if you choose the right location



The Right Location

Sunny and well drained!

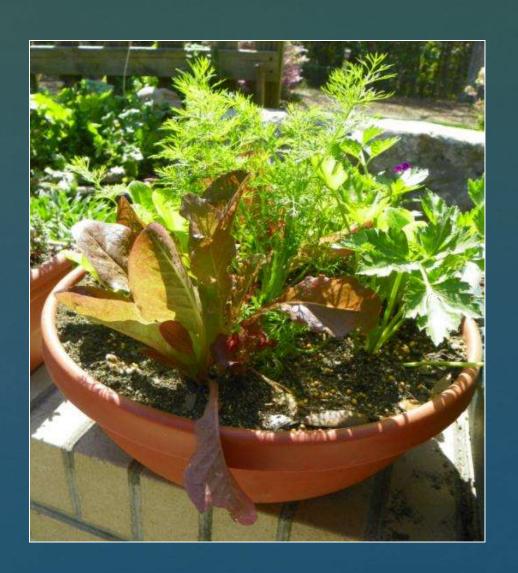
- Direct sun at least 6-8 hours/day
 - Less sun = less flavor
 - Shade grown herbs have more disease problems
- No standing water after rainfall
 - Herbs grown in poorly drained soils quickly drown or develop root rot



Solution: Containers

Herbs thrive in containers!

- Minimum 8" deep
- Drainage holes in bottom
- Clay containers "breathe"
- Fill with purchased potting mix
 - Mix of peat moss, ground bark, perlite, vermiculite --- no fertilizer







Containers

Volume and drainage most important considerations



Containers

Best to grow 1 variety per pot unless growing in large containers

- Easier to manage watering
- More vigorous herbs with take over less vigorous varieties
- Some are annuals that have to be replanted each season



Strawberry pots can be difficult to water

Watering Containers

- Allow containers to <u>dry</u> <u>out</u> between watering
- Then water thoroughly until water drips out of the bottom of the container
- Never leave sitting in saucer of water



Overwatered Rosemary

Providing Nutrients

- Many herbs prefer
 lower nutrient levels Avoid potting soils that contain fertilizers
- Instead, provide nutrients with slow release or organic fertilizer
- Avoid liquid fertilizers on perennial herbs



Time Release





Liquid

Option 2: Raised Beds

- At least 8" deep
- 4' wide or less
- Length depends on material used and space available
- Fill with **mix** of soil and compost (50/50)
- Can mulch with pea gravel or ground pine bark



Raised Beds





Get Creative! But keep maintenance in mind!







Herb Flowers

Herb flowers are edible!

- Herb flowers are favorites of many pollinators and beneficial insects
- Flowering reduces leaf production and flavor
 - remove flowers if more leaves needed
- Must allow flowers to mature if desire seed production





Harvesting Herbs

- Best time:
 - Early morning after dew dries
 - Just before blooms open
- For most herbs harvest leaves at tips (2"-3")
- Pinch or cut just above a node (where new leaves are sprouting)





Freezing Herbs

- Rinse and chop
- Freeze in ice trays with water
- Alternative: spread on cookie sheets
- Store in freezer bags
- Lose color but retain flavor



Drying Herbs

- Air Dry
- Dehydrator
- Microwave
- Oven dry



More tips from Pat Weisbrodt!

Culinary Herbs for Central NC

To grow successfully, need to know:

Life Cycle

- Annual- cool or warm season
- Perennial

Preferred Conditions

- Sun or Shade
- Soil Drainage
- Fertility



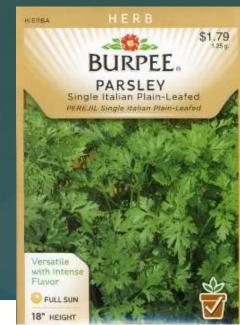
Annual Herbs

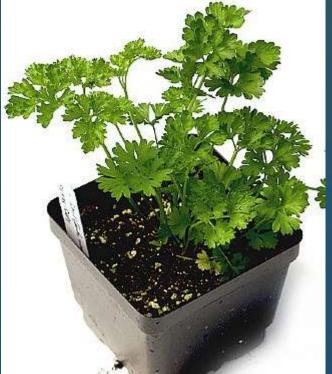
Can be grown from seed or transplants

- Seed trickier but cheaper
- Good if need lots of plants

When to plant:

- Cool Season = March/April and Sept.
- Warm Season = mid April August





Basil Ocimum basilicum

- Warm Season Grower
 - Very sensitive to frost
- Easy from seed; Easy to root from cuttings
 - Sow new batch every
 3-4 weeks
- Prevent drought stress
- Cut off flowers to keep up leaf production
- Genovese preferred culinary type



Basil Varieties

Greek Columnar - very upright, 4' tall; does not bloom





'Purple Ruffles' - purple leaf



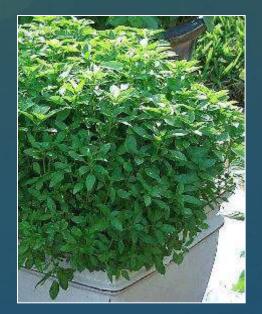
Cinnamon or Mexican Basil



Thai Basil, 'Siam Queen' - compact 12"



'Italian Large Leaf' for pesto



'Spicy Globe' - Small leaves on compact plants

Other Warm Season Annuals



Cuban Oregano

Plectranthus amboinicus

Strongly fragrant, large fleshy leaves. Grown as a houseplant or ornamental. Sun to pt. shade, well drained, moist soil. Overwinter indoors

Stevia

Stevia rebaudiana

Heat loving, drought tolerant annual (perennial in zone 9). Sun, well drained soil. Add leaves to tea for a natural sweetener



Cool Season Annual Herbs

- Plant Aug-Sept for fall crop;
 Feb-March for spring
- Die out in heat of summer
- Can grow in winter in sunny spot with minimal heat
- If room, allow to bloom in summer – blooms attract beneficial insects and sow the fall crop!





Bolting

Some plants respond to daylength

Lengthening days trigger reproductive growth (flowering)

Cool season herbs bolt rapidly in summer



Cilantro in summer

Parsley

- Soak seed for 6-8 hrs before sowing
- Survives most winters
- Dies out mid summer after flowering
- Sun pt. shade, moist, well drained soil



Caterpillars

- Black swallowtail larva feed on all members of parsley/carrot family
- Can handpick grow perennial fennel or extra parsley as 'nursery' crop
- Or spray with B.t, spinosad, or neem oil



Parsleyworms, aka **Black Swallowtails**

Egg

Young Caterpillars



Caterpillars

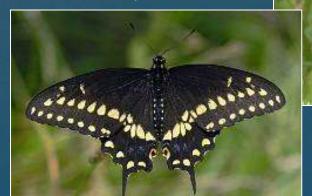


Will also eat:

Fennel, Dill, Queen Anne's Lace, Carrot,



Adult Male



Adult Female

Annual Parsley Relatives



Dill

Anethum graveolens

Not as cold tolerant as parsley, plant early fall and early spring.



Cilantro, Coriander

Coriandrum sativum

Fall and early spring for foliage - successive sowings. Let mature for seed.

More Parsley Relatives

- Caraway
- Chervil
- Cumin

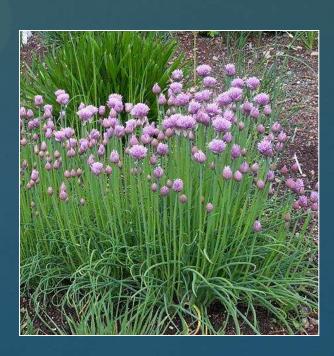
Grown similar to dill/cilantro

Typically grown from seed – rarely find plants for sale



Culinary Herbs for Central NC: PERENNIALS







Perennial Herbs

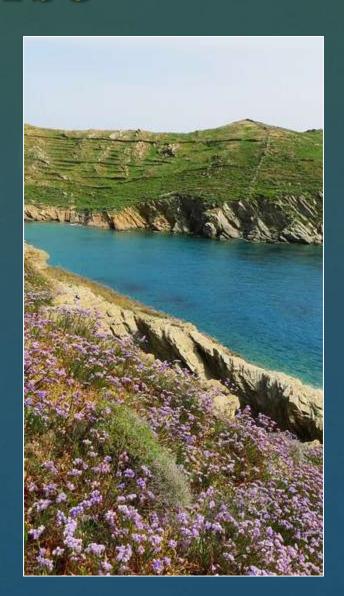
- Most will live for several years if happy
- Most are sensitive to overwatering
- Typically purchased as plants
- Best time to plant outdoors: March – October
- Require little fertilizer



Check out farmers markets and local nurseries for herb plants

Mediterranean Herbs

- Many popular perennial culinary herbs – Rosemary, Sage, Thyme, Oregano
- Require full sun, excellent drainage
- Drought tolerant
- Irrigation and fertilizer lead to disease problems and reduce flavor
- Expect some deaths during August!



Oregano



Greek Oregano

Origanum vulgare subspecies hirtum

Preferred Culinary



Common Oregano

Origanum vulgare

Flowers in summer, less flavorful



Sweet Marjorum

Origanum marjorana Tricky to grow

Italian Oregano

O. marjorana x O. vulgare

Easier to grow

SageSalvia officinalis

'Purpurascens'





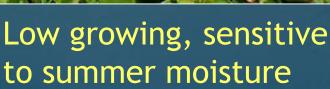


'Berggarten'
Favorite
culinary, large
leaves.

'Icterina'

Common Thyme Thymus vulgaris





Lavender blooms in early summer



Lemon Thyme

Thymus x citriodorus

Lower growing with softer stems. Several gold leaved and variegated varieties are available.

English Lavender
Lavandula angustifolia
- not heat tolerant



French
Lavender

Lavendula
dentata - not
cold hardy

Lavenders



Spanish Lavender

Lavandula stoechas

Most long lived lavender in NC



Lavandin

Lavandula x

intermedia

'Grosso' does

okay

Rosemary Rosmarinus officinalis

- Tough, evergreen shrub
- Sun, good drainage
- Drought tolerant
- Deer resistant
- Ornamental and culinary
 upright and trailing
 forms available
- Upright varieties typically reach 3'-4' tall and wide or more!



Bay Laurus nobilis

- Evergreen shrub that is winter hardy in the piedmont
- Expect some cold damage in harsh winters
- Requires sun and well drained soil
- Grows 4'-6' or taller!



Other Perennial Herbs





Garlic

Chives

Chives

Allium schoenoprasum

Extremely easy from seed or division. Long lived, self seed. Sun well drained soil, drought tolerant.

Allium tuberosum

Taller than chives, same requirements. Self seeds prolifically.

Fennel

Foeniculum vulgare

- Perennial
- Sun light shade, moist to dry soils
- 3'-5' tall, yellow flowers in summer – attracts beneficials
- Florence Fennel is related but different, grow as a summer annual



Mints All spread extremely vigorously!!



Spearmint

Mentha spicata

Sun to part shade,
moist to average
soil.



Peppermint

Mentha piperita

Grow in containers

above ground.



Pineapple Mint

Mentha suavolens 'Variegata'



Apple Mint

Mentha suavolens

Tarragon

French Tarragon

Artemisia dracunculus var. *sativa*

- True culinary tarragon
- Struggles in heat and humidity – afternoon shade helps

Russian Tarragon

Artemisia dracunculoides

- Edible tarragon relative but little flavor
- Larger, more heat tolerant plant



Mexican Mint Marigold

- Tagetes lucida
- A perennial marigold!
- Marginally hardy in zone 7
- Tarragon substitute (leaves)
- Yellow flowers in fall, 3' x 2'
- Sun, well drained soil
- More heat tolerant than French Tarragon



Other Perennial Herbs



Salad Burnet

Poterium sanguisorba
Sun to light shade, well drained soil. Leaves have cucumber flavor - best in spring and fall.



Lemon Balm

Melissa officinalis
Very easy - sun to
part shade, well
drained soil. Easy
from seed or
cuttings.

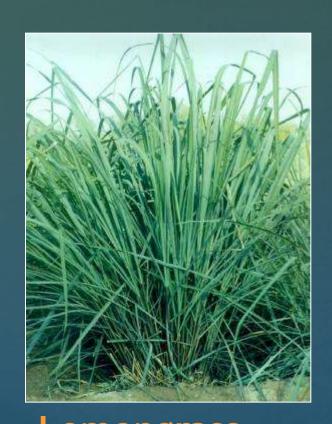


Horseradish

Armoracia rusticana Sun, rich, moist soil. Harvest roots by digging into clump rather than digging whole clump up.

Non Hardy Perennial Herbs

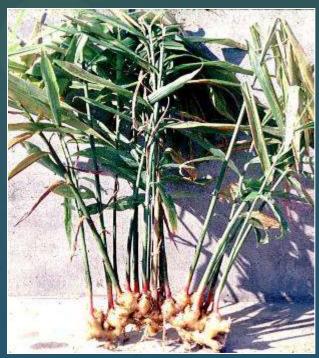
Grow outside in summer, bring inside for winter



Lemongrass
Cymbopogon
flexuosus



Lemon
Verbena
Aloysia triphylla



Culinary
Ginger
Zingiber officinale

Using and Preserving Culinary Herbs

Tips from Pat Weisbrodt, Chatham Extension Master Gardener Volunteer

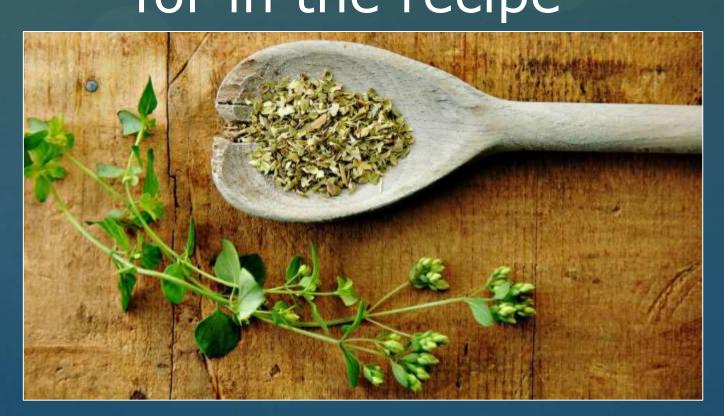
Fresh herbs are generally best for cooking

Exceptions:

- Oregano better flavor from dried
- If you find oregano too strong, try marjoram



If using dried herbs instead of fresh, use half of the amount called for in the recipe



Add dried herbs at the beginning of cooking and fresh near the end of cooking



Most herbs dry well in a dehydrator, 90°-125°

Exceptions:

- . Dill Seed
- Garlic
- Lavender
- RosemaryTie in bundles



Pick herbs in the morning before heat of the day

Rinse in cold water to remove bugs, dirt, and debris



Place in a salad spinner to remove excess water

Lay leaves or springs on trays of dehydrator, with space in between



Crush herbs when you are using them

- not when packing in jars for storage
- Use clean jars
 with tight lids



Use Virgin Olive Oil . . .

Extra virgin olive oil may overwhelm the flavor of the herbs



If you find pesto too strong...

try using ½ flat leaf (Italian) parsley and ½ basil for your recipe



Infused oils will become rancid

If adding herbs to oils, use within a few weeks



Infused vinegars last a long time

- Place herbs in vinegar
- Place in a dark cupboard for six weeks
- Strain vinegar and place in glass container



Thanks to Country Farm & Home 101 S. Small St., Pittsboro, for donating our door prize!



Learn More!

http://go.ncsu.edu/herb-resources

- Review slides
- Find fact sheets on growing and using herbs

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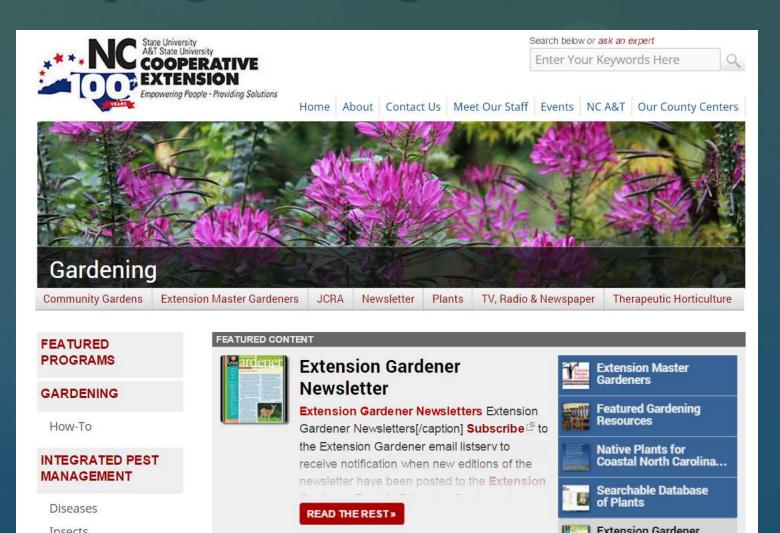
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In Chatham County,

- . 919-542-8202
- · charlotte_glen@ncsu.edu



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