

Gardening 101

(Slightly tailored for Dunwoody, Ga)

The Stuff You Have Probably Already Heard.....

(but don't really think applies to you.....)

The Dream



The Reality



Or Maybe This is
Your Dream...

(Actual DCGO bed)



But This is Current Reality

(Also an actual DCGO bed)



Gardening Basics

- Basic gardening tools
- What is my “Growing Zone”?
- What kind of soil do I have? How can I improve it?
- How do I know what to plant where?
- When and how do I plant seeds or transplants?
- How do plants make flowers and/or fruit?
- What are some easy plants to begin with? Which ones are difficult?
- How do I take care of my plants?
- Resources for New Gardeners (all Gardeners, really)

Gardening Tools

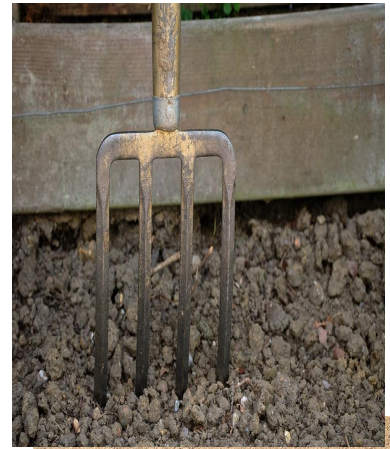
Basics:

- Gloves
- Garden Shovel (rounded edge)
- Garden Spade (flat edge)
- Hand trowel
- Pruning shears



Nice to Have:

- Digging fork
- Wheelbarrow
- Knife (hori-hori)
- Weeder
- Rake
- Small clippers
- Anything spiffy from the plant store



Zone Matters

Northern Atlanta suburbs (ie Dunwoody) are on the cusp of Zones 7B and Zone 8A.

Predictions are that global warming will cause the entire Atlanta area to be relabeled 8A pretty soon.

This means our Average Annual Extreme Low Temperatures are getting warmer, moving to 10-15 degrees F instead of 5-10 degrees F.

Bad news for peonies, many bulbs...

Good news for food crops...



Plant this.....

- Black-eyed Susan (partial or full sun)
- Four O'clock (partial or full sun)
- Hosta (shade)
- Salvia (sun)
- Butterfly weed (sun)
- Shasta daisy (partial or full sun)
- Lavender (sun)
- Bleeding heart (shade or partial sun)
- Okra
- Peppers
- Lettuces
- Beans
- Squashes
- Cucumbers

Not this.....

- Pineapple
- Birds of Paradise
- Banana tree
- Bougainvillea
- Sago palms
- Lemon and Lime trees, other citrus
- Lupines
- Cranberries
- Tulips
- Rhubarb

Let's Talk about Soil...

Components of Soil

- Minerals (all are decomposing granite)
 - Sand
 - Silt
 - Clay
- Air
- Water
- Organic Matter

Sand -

Relatively HUGE mineral form,
won't retain much water,
leeches water and nutrients quickly

Silt -

Tiny compared to sand,
slippery, slimy feel

Clay -

Microscopic compared to sand, silt,
retains moisture and nutrients well,
very fertile

How to Test Your Soil

Dig straight down about 8 inches in several places in your established or proposed garden.

Mix the samples together in a bowl.

Fill a “Soil Sample” bag to the level indicated, fill in the blanks including what types of plants you would like to grow (“flowers, beans, melons, etc.) and submit it to the DeKalb County Extension Office, along with \$10 at

4380 Memorial Drive Suite 200
Decatur, GA 30032
404-298-4080

Results will be emailed to you in 10-15 days.



Typical Dunwoody Soil

Organic Matter floating on top

Clay layer (light tan)

Silt layer (brown)

Sand layer (dark & light grit)



Good soil, air and water = 90% of the battle

*****Gardening 101 TIP*****

Forget about “amending” your soil with anything EXCEPT ORGANIC MATTER!

Soil seems like solid clay?	Add ORGANIC MATTER
Soil has too much sand?	Add ORGANIC MATTER
Soil won't drain?	Add ORGANIC MATTER
No topsoil?	Add ORGANIC MATTER

What constitutes ORGANIC MATTER?

Dead and dying “Browns” and “Greens”

BROWNS are carbon sources

- Dead leaves, shredded or whole
- Non-coated cardboard, newspaper, shredded paper
- Twigs and branches, bark, stems (except tomatoes)
- Aged compost
- Animal waste and cadavers

GREENS are nitrogen sources

- Grass clippings, discarded plants, discarded fruits and veggies and their peels

Creating a New Garden Bed with Organic Matter

1. Mark off the desired space of the new garden bed.
2. If currently lawn, “scalp” the grass at root level, turn it over and leave it.
3. If currently “weeds”, kill them with Round-Up or pull the weeds.
4. Layer with overlapping thick corrugated cardboard.
5. Water the cardboard thoroughly; soak it.
6. Layer the cardboard with 2-3 thicknesses of newspaper, soak it again.
7. Layer on compost (4-6”, purchased or home-grown).
8. Top with 4-6” of organic mulch (pinestraw, straw, leaves or bark chips).
9. Come back in 6 months and dig into your fabulous new soil!

Right Plant in the Right Place - Ornamental Plants

“I’ve found a plant that I loooooooooove!!!!”

Is it hardy in my growing zone? If it’s an annual, go for it!

How big will it grow?

Does it like sun, part-sun, part shade or shade?

Does it like wet feet? Even moisture? Is it drought tolerant? Will it grow in a frying pan?

Will deer, rabbits and other “pests” destroy it?

Does it play well with other plants or will it become an invasive bully?

Will it poison my dog, cat or children?

What color(s) will it bring to my garden?

What other features does it have? - smell, interesting foliage or shape, edible fruit





Right Plant in the Right Place - Vegetables and Herbs

“I loooooove lima beans/tomatoes/parsley, etc! I want to grow them!”

Just how many lima beans/tomatoes/parsley will my family, friends and neighbors consume?

How big will they grow?

Do I have enough sun?

Does they like wet feet? Even moisture? Are they drought tolerant?

Will deer, rabbits and other “pests” enjoy them before I do?

Do they play well with other plants (companion planting)?

Are they “high maintenance” and do I want to fiddle with that?





Know Before You Buy and Plant....

*****Gardening 101 Tip*****

1. **Read the Seed Packet completely** (primarily veggies, herbs and annuals) - where to plant (zone and sun exposure), when to plant, how to plant, germination time, hardening off time (if needed), transplanting time, mature size, days to harvest, determinate or indeterminate harvest, etc.
2. **Read the Plant Label completely** if purchasing at a nursery (primarily veggies herbs, annuals and perennials)- cultivar name and color, hardiness zones, how to transplant, size at maturity, bloom times, pruning needs, etc.

TURNIP *Purple Top White Globe*

Brassica rapa



\$1.99
2 grams

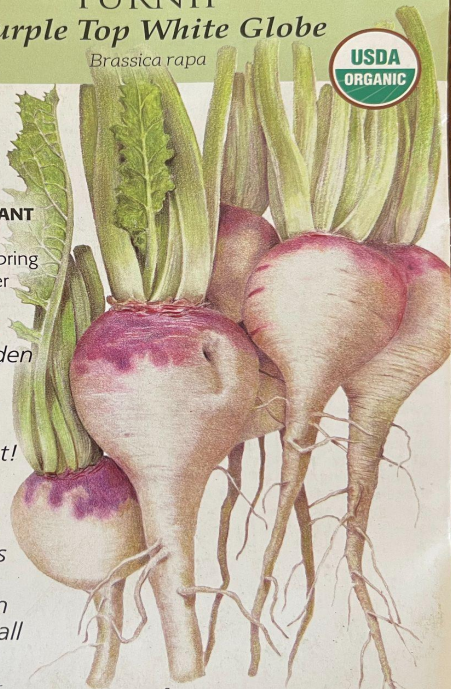
FROST TOLERANT 50 DAYS

Sow in early spring
or late summer

HEIRLOOM

*Is your garden
still turnip-
less? You'll
want to
change that!
Nutritious,
delicious
greens and
hearty roots
are what
homegrown
turnips are all
about!*

Botanical INTERESTS®



PEEL BACK FLAPS
MORE INFO INSIDE



TURNIP *Purple Top White Globe*



Seedling

Days to Emerge:

5 - 10 Days

Seed Depth:

1/4"

Seed Spacing:

A group of 3 seeds
every 4" - 6"

Row Spacing:

18"

Thinning:

Thin to
1 every 4" - 6"

Maturity:

50 Days

Date Seed Sown

We are dedicated to inspiring and educating the gardener in you.
That's why we've put even more helpful information inside.

First-time growers will be pleasantly surprised! This root crop that has fed the world's people for thousands of years can be eaten fresh, roasted, or used like potatoes, even mashed! Fun fact: The old Irish tradition of putting lit embers inside a hollowed out turnip was the inspiration for Jack O'Lanterns. Turnips store particularly well. *This packet sows up to 124 feet.*

When to sow outside: RECOMMENDED.

2 to 4 weeks before your average last frost date, and when soil temperatures reach 50°F, ideally 65°-80°F. *Successive Sowings:* Every 2 weeks up to 8 to 10 weeks before your average first fall frost date. *Mild Climates:* Sow in fall for cool-season harvest.

When to start inside: Not recommended for roots sensitive to disturbance.

Special germination instructions: If growing exclusively for young greens, sow thickly at 3 seeds per inch, and do not thin out seedlings.

**OPEN POLLINATED
AND
UNTREATED**



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www.botanicalinterests.com



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by the Colorado Dept. of Agriculture

Lot #1 • Packed for 2022
Sell by 12/31/2022

Respect April 15

*****GARDENING 101 TIP*****

April 15 is, on average, the last frost date in our area.

Seed packets almost always refer to “before last frost date” to time proper cool-season (Spring) seed planting or “after last frost date” to time proper warm-season planting.

November 15 is, on average, the first frost date in our area.

Seed packets often refer to “before first frost date” for proper cool-season (Fall) seed planting.

Hardening off

Moving tender young seedlings from the warmth and humidity of a greenhouse (or kitchen window) to the harsh reality of Spring weather can be treacherous for the seedlings.

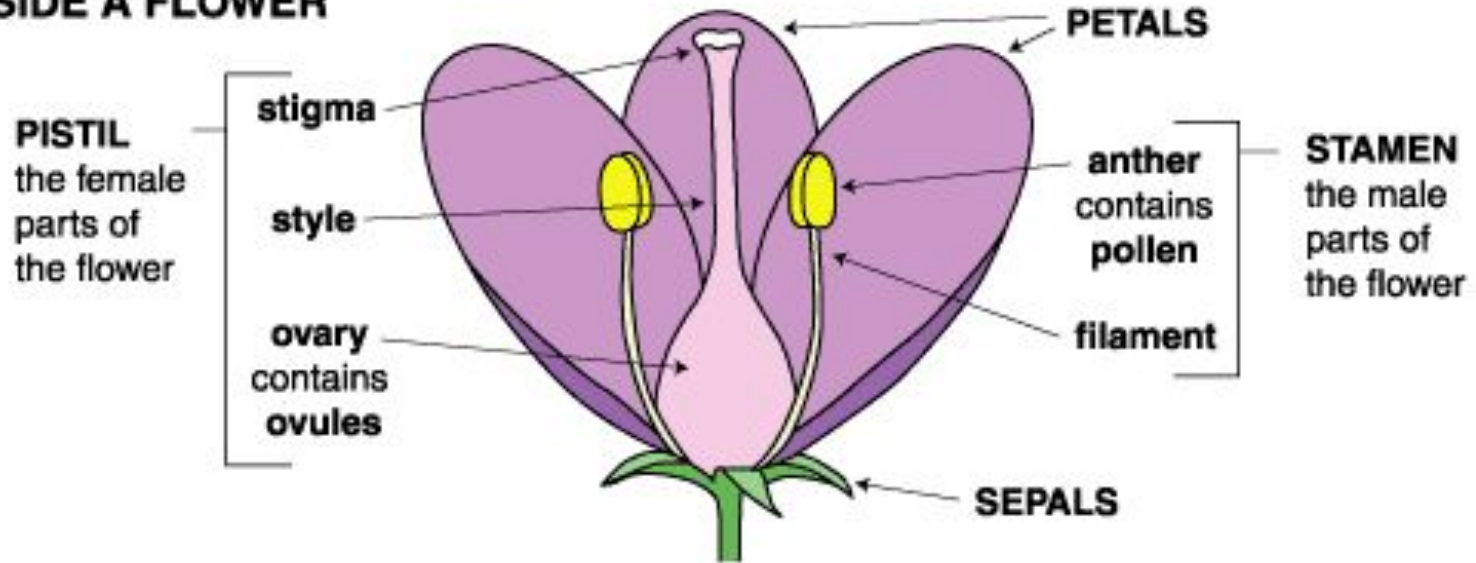
As the weather warms, place the seedlings in a protected area outdoors during the day, bring indoors at night for several days.

Gradually leave the seedlings outdoors in less protected areas over the period of a week or so before transplanting into the ground.

This is why “hothouse” hydrangeas and other houseplants die of shock if placed outdoors immediately.

Plants have sex lives (!!)

INSIDE A FLOWER



Somehow the Pollen must get to the Stigma.....

By wind

By “jostling” (corn, tomatoes)

With the help of Pollinators

- Bees
- Wasps
- Birds
- Butterflies
- Moths
- Flies
- Beetles
- Ants
- Bats
- Even some mammals



Perfect Flowers vs Imperfect Flowers

Perfect flowers have both male and female parts, are called “Hermaphroditic”

Tomatoes

Roses

Lilies

Sunflowers

Daffodils

“Self-pollinating” plants

Imperfect flowers are either “Male” or “Female” and require help pollinating

Squashes, zucchini

Pumpkins

Cucumbers

Melons

I have a ton of flowers on my Squash plants....

Male flowers come out first.....



Female flowers come out later and are much fewernotice round ovary beneath the flower petals and enlarged stigma



Herbs and Garlic First, Tomatoes Last

*****GARDENING 101 TIP*****

Start with easy-to-grow plants...

Cold-hardy herbs, such as rosemary, sage, chives, thyme

Cold-hardy veggies, such as radishes, turnips and garlic

Cool-season leafy greens, such as collards, lettuces, Asian greens, arugula

Hot-season veggies, such as okra, peppers, beans*, squash*

Native perennials, such as Black Eyed Susan, Bee Balm, Stokes Asters, Beautyberry, Carolina Jessamine, Solomon's Seal, Shield Fern, Sensitive Fern...

* be prepared to inspect daily for Mexican bean beetles, squash borers

But I wanna grow TOMATOES!

Tomatoes are wonderful and the epitome of Summer, but.....

- They are susceptible to many viruses, blights, wilts and other frustrating things. Suggestion: buy patented hybrid plants which are specifically resistant to Fusarium Wilt and Early Blight but prepare yourself for some damage anyway from nearby non-resistant tomatoes.
- They require consistent watering, but not too much....
- They are irresistible to squirrels, chipmunks, birds and other varmints.
- (Advanced Gardening tip - hang small and medium red Christmas balls on your tomato plants at bloom time to confuse birds and other pests.)
- *****GARDENING 101 TIP***** Cherry tomatoes are probably the easiest for new gardeners.

How should I care for my plants?

- Know how “old” your plant is
- Watering
- Fertilizing
- Deadheading
- Overwintering

Watch the New Plants - First Year it Sleeps

Don't "plant and forget"

- \$50 hole for a \$5 plant is true
 - Hole should be 3 times the width of the pot
 - NO deeper than the pot
 - Do NOT amend the native soil (trees and ornamental shrubs)
 - Water the hole - about $\frac{1}{3}$ to half full, wait for the water to begin percolating
 - Center the plant, fill in the hole with medium "tamping", water in well
- Water daily, semi-weekly, weekly till new growth shows
- Supplement water during first year if needed
- "The first year, it sleeps. The second year, it creeps. The third year, it LEAPS."

Let's discuss watering

Too much watering is the most common cause of death for houseplants, some annuals and perennials. Leaves wilt and/or turn yellow and brown and are limp.

Too little watering is pretty rare for established outdoor plants, but common for houseplants. Leaves turn brown and are dry and crinkly.

*****Gardening 101 Tip*****

Whenever possible, water the soil, not the plant. Practice smart watering to conserve water.

About 1" of rainfall per week is good for outdoor plants, in general.

Fertilizing

Remember, great soil eliminates the need for most fertilizing! Active micro-organisms in the soil keep minerals, water and air available to plant roots.

Micro-organism waste makes minerals “accessible” in plant-friendly formats.

10-10-10 - 10% Nitrogen, 10% Phosphorus, 10% Potassium

Nitrogen = green plants

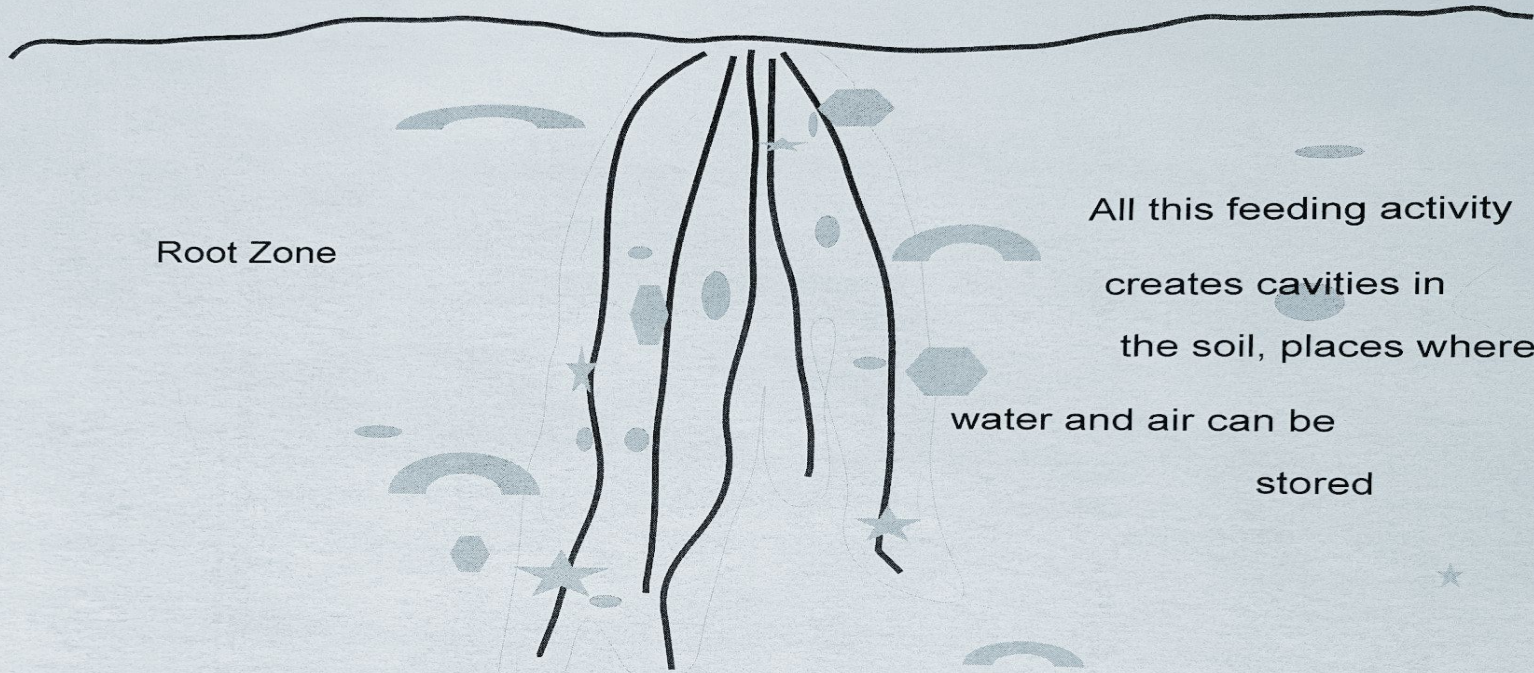
Phosphorus = good roots and production of blooms/fruit

Potassium = general well-being

The Magic in the Soil Begins With.....

Beneficial bacteria and fungi in the soil, which

- Degrade residual toxic chemicals
- Tie up nutrients present in the mineral particulate so they are not leachable and lost as water moves through the soil
- Serve as food for protozoa, beneficial nematodes and micor-arthopods which, in turn, release the tied-up nutrients in plant-available form



Root Zone

All this feeding activity
creates cavities in
the soil, places where
water and air can be
stored

PLUS, the previously unavailable nutrients are converted into plant-usable nutrients
by the consumers, which squish juices from the consumed bacteria and fungi!

Deadhead regularly.....



Deadhead to:

- Encourage new blooming
- Tidy up the plant
- Remove seed heads (seed gathering)
- Prevent seed heads from forming (daylilies, daffodils, candy lilies, etc.)

Deadhead with your thumbnail, pruners or clippers

Deadheading makes sure you check closely on your plants for pests, diseases.

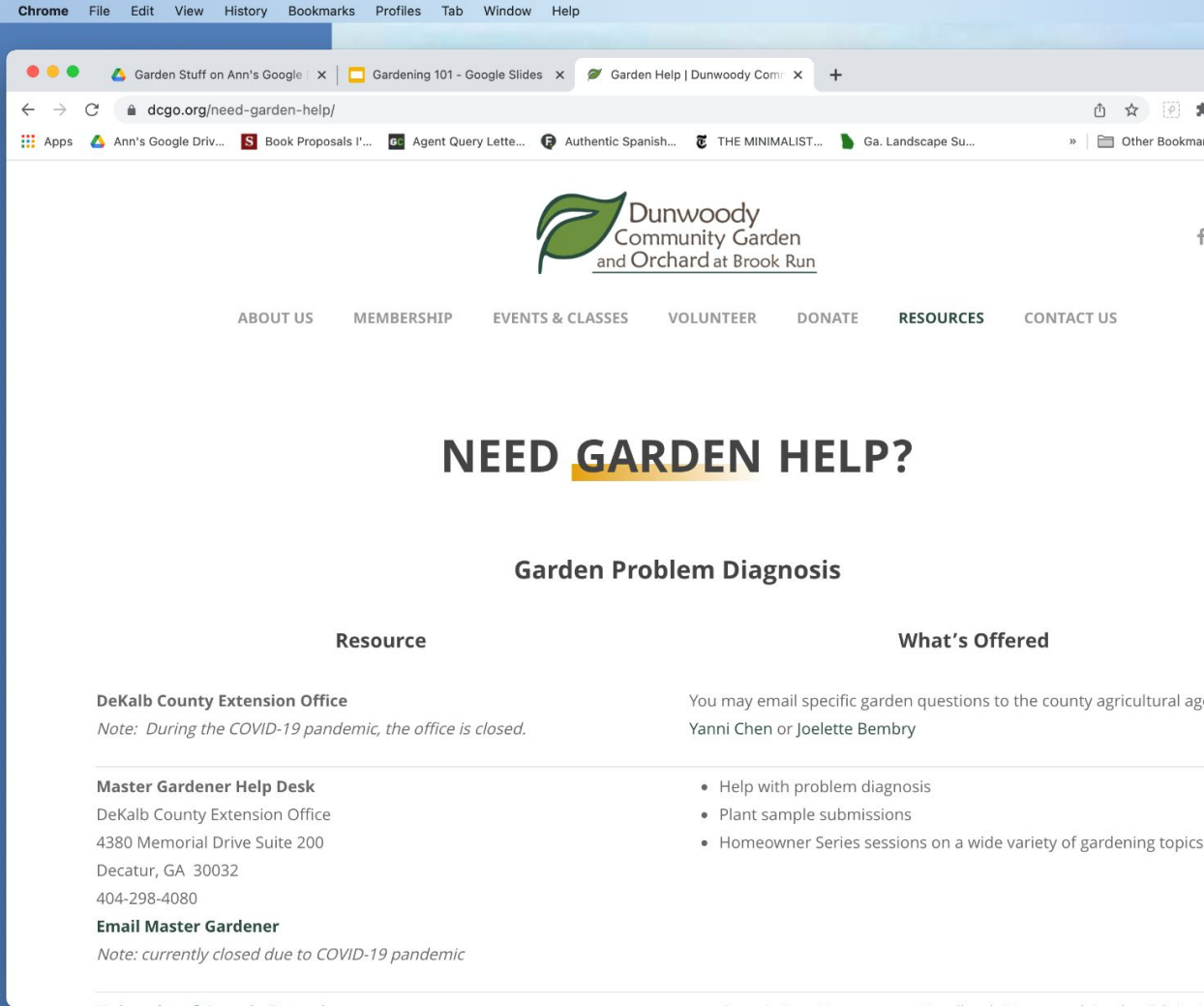
Big Box Plants Can Be Risky...

Sure, the big box stores buy in bulk and may have cheaper prices on a limited variety of common plants, but independent nurseries offer:

- more long-time staff truly knowledgeable about local growing conditions and local native plants,
- a much larger variety of plants,
- custom ordering of specific cultivars,
- **no neonicotinoids**, an class of insecticide now banned in the EU and Maine which kill bees, other pollinators. Pollinators feeding on flowers treated with neonics die before they can pollinate your veggies!
- twice the revenue kept in our local economy (\$46-60 vs 20-35 of \$100 spent)

Resources

DGCO.org [Garden Help](https://dcco.org/need-garden-help/)



The screenshot shows a web browser window with the URL dcco.org/need-garden-help/. The page features the Dunwoody Community Garden and Orchard logo at the top, which includes a green leaf icon. Below the logo is a navigation menu with links: ABOUT US, MEMBERSHIP, EVENTS & CLASSES, VOLUNTEER, DONATE, RESOURCES, and CONTACT US. The main heading is "NEED GARDEN HELP?". Below this is a section titled "Garden Problem Diagnosis". The page is divided into two columns: "Resource" and "What's Offered".

Resource	What's Offered
DeKalb County Extension Office <i>Note: During the COVID-19 pandemic, the office is closed.</i>	You may email specific garden questions to the county agricultural agent, Yanni Chen or Joelette Bemby.
Master Gardener Help Desk DeKalb County Extension Office 4380 Memorial Drive Suite 200 Decatur, GA 30032 404-298-4080 Email Master Gardener <i>Note: currently closed due to COVID-19 pandemic</i>	<ul style="list-style-type: none">• Help with problem diagnosis• Plant sample submissions• Homeowner Series sessions on a wide variety of gardening topics

and.....

The image is a screenshot of a web browser window displaying the website for the Dunwoody Community Garden and Orchard at Brook Run. The browser's address bar shows the URL dcgo.org/miss-a-master-gardener-talk/. The website's header features the organization's logo and a navigation menu with links to ABOUT US, MEMBERSHIP, EVENTS & CLASSES, VOLUNTEER, DONATE, RESOURCES, and CONTACT US. The main content area is titled "MISS A MASTER GARDENER TALK?" and includes a sub-header "Click to see the presentation" followed by seven green buttons with white text: "Companion Planting", "Diagnosing Plant Problems", "Fall Vegetable Gardening", "Fruit Trees", "Herbs", and "Hot Weather Gardening Tips".

On the right side of the browser window, a calendar notification is visible, stating "Finish MG talk Today at 8:00 AM Add photo of seed packet". The desktop background is a solid blue color, and several files and folders are visible on the right side, including "OLD PHOTOS", "EGYPT", "Relocated Items", "DCGO Board Member...021.docx", "Pantry Bed Tenders and Harv", "IMG_7150.jpeg", "DCGO 2022 Presentations.pdf", and "DCGO January minutes.docx".