

JANUARY 2021

WHAT'S GROWING ON?

TCFPC Community Gardens and Urban Agriculture Working Group



CGUA PLANS FOR 2021

The Community Gardens and Urban Agriculture working group met in November to touch base on current projects and to brainstorm new ones.

The group decided that CGUA needs to be a resource connection for all the great work happening in the community. To start, we will create a Facebook group to help connect projects and resources. We will also ask the Board to help us fundraise for community efforts related to CGUA projects.

2021 CGUA Projects:

- **School Garden Mapping & Support** - the group will continue to update the Local Foods Map with school garden information. We will also work to better support local school garden projects through networking resources.
- **CGUA Advisory Committee** - this committee will be on call to provide guidance and expertise to emerging garden projects through TAFB's Community Garden Network.
- **CGUA Facebook Group** - the Facebook group is LIVE and can be used to connect garden projects with resources, funding and expertise through an open, public forum. The group is open to those needing and offering resources. <https://www.facebook.com/groups/cguaresources>

Join us for our next meeting via **Zoom on Thursday, January 21st at 3pm.**

Guest Speaker: Courtney Davis, Texas A&M AgriLife Tarrant County Extension Director

Zoom Link: <https://tcu.zoom.us/j/93644384217?pwd=Z3Q3QjBjenQ2d3ArZkRrVWM4ODhoZz09>

Password: 291813

For questions and more information about CGUA, contact our Chair, Dave Aftandilian at d.aftandilian@tcu.edu.

FARMING INNOVATIONS FROM THE GROUND UP

BY LESLIE EADES

Prior to the pandemic, 10.5% of US households were food insecure. Some statistics show that number doubled within a few short months and continues to grow. Under this new stress, agriculture and food providers have been pressed to reinvent the food supply chain - to grow and provide food to the masses in ways that are safe, local, affordable, and sustainable. As part of this reset, farmers and distributors alike have looked at the potential benefits in innovation.

For several years, Controlled Environment Agriculture (CEA) has been evolving as a solution to expand food production through technology. Once just simple covered rows of crops, greenhouses have evolved into sophisticated farming ecosystems using hydroponics, aquaponics, or aeroponics to deliver water and nutrients to the plants.

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Events & Classes

TCFPC GENERAL MEETING

February 4th, 4pm

<http://www.tarrantcountyfoodpolicyCouncil.org/news---events.html>

TARRANT AREA FOOD BANK

Planning Your Community

Garden - Jan. 13th, 2pm

Planning Your Food Garden

- Jan. 20th, 2pm

<http://tafb.org/events>

BRIT

Greenhouse Pests - Jan. 7th, 10am

Starting Your Garden

Transplants - Jan. 9th, 10am

From Healthy Soil to Healthy Garden - Jan. 19th, 6:30pm

Landscape Design - Jan. 27th, 10am

<http://brit.org/events>

SATURDAYS 8AM-12PM

Cowtown Farmers Market

3821 SOUTHWEST BLVD



Anyone who thinks gardening begins in the spring and ends in the fall is missing the best part of the whole year; for gardening begins in January with the dream.

JOSEPHINE NUESE



JANUARY TO-DO

Watch the weather forecast and prepare your frost protection for cold nights.

Plant onion transplants (slips) whenever the soil is workable.

Start tomatoes and peppers indoors towards the end of the month.

Plant asparagus root crowns as soon as they are available at the nursery.

Add quick-growing winter crops like lettuce and radishes to empty spaces when the weather is mild.

Vertical farming is a relatively new addition to the CEA concept and can be constructed underground, on top of buildings, or anywhere in between. Plantings can be arranged in layered stacks often using artificial light instead of sun.

With the continued migration into urban centers, the flexibility offered with CEAs is a draw. From the US to the EU to Asia, several vertical farm startups have emerged, attracting millions in capital. The interest in vertical farming is strong and expected to grow to \$3B in revenue by 2024 from virtually nothing today.

I recently had the opportunity to see a vertical farm prototype up close. Just 30 miles south of Fort Worth is Eden Green Technology (www.edengreen.com). Deceptively simple from the outside, Eden Green is a state-of-the-art 1.5-acre hydroponic greenhouse, a vibrant formula of agriculture meets tech and an innovative approach to "locally grown" without limitations of seasonality, location, or growing conditions.

Inside, row after row of soaring towers showcase greens, herbs, berries, peppers, cucumbers, and tomatoes. Plantings can be harvested as many as 11 times a year, yielding an estimated 2.7M servings of fresh produce. Ongoing research and development continually pushes the limit on varieties that can be grown. Afforded the opportunity to sample some the products, I found them full of flavor and exploding with freshness.

Plants are started in traditional hydroponic grow pods and then transferred to grow towers. A microclimate network controls the amount of nutrients, water and air temperature that reaches each plant. Recycled water is delivered through a pump system and cleared of pathogens using LED. It is no wonder plants thrive in this high-tech environment where food, water, and light can be controlled in ways not found in nature.

As with other established vertical farm concepts, such as Aerofarms, Plenty, and Bowery, Eden Green maximizes a sustainable growing environment in a relatively small footprint - perfect for urban or suburban locations. The stats are impressive: high density with year-round yields, zero crop loss, reliable and consistent production, no use of pesticide or herbicide, 99% less land needed, and 98% less water required than traditional farming -- needing only about two households' worth of water per year. Other benefits to vertical farming include potential local job creation and reduction in transport costs and emissions if the objective is to serve the local community.

The pros are admirable, yet there are some cons to consider. Like any new technology, the initial investment is significant, and the return is usually several years out. Vertical farming is tech-dependent and requires a lot of energy to operate. Distribution partners or outlets can be hard to secure and are necessary for the operation to be profitable. Alternative formats such as those offered by Freight Farms (40' shipping containers) or GP (grow pods) are smaller and less expensive points of entry. There is also the potential for job disruption within farming communities if revenue shifts from rural areas to urban centers.

Is this the way of the future for farming and food insecurity? It's definitely a way to utilize urban, suburban, and rural space not fit for traditional growing. And it's one more effort to democratize the availability of fresh and health food for everyone.

Article contributed by Leslie Eades, reader and friend of the newsletter, volunteer at Taste Community Restaurant, and student at the Institute for Integrative Nutrition.

IN THE NEWS

- A look at food safety knowledge gaps and regulation in small Texas farms <https://urbanagnews.com/blog/news/discovering-gaps-in-food-safety-practices-of-small-texas-farms/>
- Investigating sustainable farming practices with reclaimed water <https://civileats.com/2020/12/17/is-farming-with-reclaimed-water-the-solution-to-a-drier-future/>

Winter Greens and Citrus Smoothie

Recipe by: Hannah Lamar

This vibrant green smoothie can brighten up any winter day! Packed full of winter greens and citrus fruits, enjoy this sweet treat that provides you with bountiful fiber, vitamin C, vitamin A, protein, and more. This is a great addition to breakfast or a perfect afternoon snack. This tasty, nutritional smoothie could be especially helpful for anyone looking to include health and wellness in their New Year's resolution.

INGREDIENTS

- 1 cup kale (or other dark leafy green, such as spinach), roughly chopped.
- 1 large orange, peeled
- 1 banana
- 2 tablespoons almonds or walnuts
- 1 tablespoon honey
- 1/2 cup milk or non-dairy milk product
- 1/2 cup ice or frozen fruit

PREPARATION

- Add all ingredients into a blender and mix until smooth
- Taste and adjust for thickness and sweetness level, add more honey or milk if needed
- Pour and enjoy!



FUN FACTS ABOUT CABBAGE

Cabbage is a hardy cool season crop that grows well in North Texas. You may even have some growing in your garden right now!

- Cabbage is in the Cruciferae family along with broccoli, Brussels sprouts, kale, collards, mustards, turnips, Chinese cabbage and radishes. The family name comes from the crucifix or cross-shaped flower found on these plants.
- Cabbage has been cultivated for over 4,000 years! Records can be traced back to China in 4000 BC.
- Cabbage is the national food of Russia. Russians tend to eat seven times as much cabbage as Americans.
- Babe Ruth used to wear a cabbage leaf under his baseball cap during games. He would switch the leaf out for a new one halfway through the game.
- At the beginning of the 20th century, cabbage was considered food for poor people. Now, it is considered to be one of the most nutrient-packed vegetables with wonderful anti-aging and anti-cancer properties!

For more fun facts about cabbage, visit:

https://www.canr.msu.edu/news/cabbage_and_the_science_behind_them

GARDEN RESOURCES

Local Nurseries:

Archie's Gardenland
Calloway's

Free Seeds:

TAFB Community Garden Program;
communitygarden@tafb.org
GROW North Texas

Bulk Soil/Compost:

Living Earth
Silver Creek Materials
City of FW Drop-Off Stations

Garden Curricula:

CGUA-
<http://www.tarrantcountyfoodpolicycouncil.org/garden-2.html>

Community Food Systems Map:

<http://www.tarrantcountyfoodpolicycouncil.org/local-food-systems.html>

VIRTUAL GARDENING CONTENT

Tarrant Area Food Bank

[youtube.com/user/TarrantAreaFoodBank](https://www.youtube.com/user/TarrantAreaFoodBank)

Water University

[youtube.com/c/WaterUniversity](https://www.youtube.com/c/WaterUniversity)

Texas A&M AgriLife Extension

[youtube.com/c/txextension](https://www.youtube.com/c/txextension)

BRIT

[youtube.com/user/BRITplanttoplanet](https://www.youtube.com/user/BRITplanttoplanet)

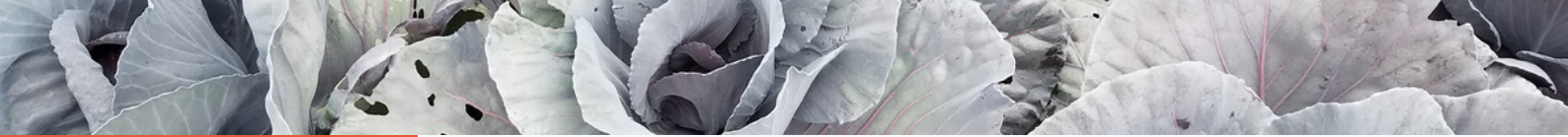
Tarrant County Master Gardeners

[youtube.com/c/TarrantCountyMasterGardeners](https://www.youtube.com/c/TarrantCountyMasterGardeners)

Dig Deep Conference 2020

[tarrantcountyfoodpolicycouncil.org/dig-deep-conference-2020](https://www.tarrantcountyfoodpolicycouncil.org/dig-deep-conference-2020)





CHARLIE'S TOP CROPS

Hakurei Turnips

Rover & Bacchus Radishes

Freckles Romaine & Ruby

Red Lettuces

Red Ace & Golden Detroit
Beets

Green Magic & Texas

Superstar Broccoli

Early Round Dutch
Cabbage



SHINE'S GARDEN CHATS

BY CHARLIE BLAYLOCK

Happy New Year! I hope you rested well on the longest night of the year. We make it a point to spend a full 12 hours in bed on December 22. Most of that time is reading, and some drinking coffee, but it is the way we celebrate the longest night of the year. With the pandemic going on, it has made me recognize how important our own little celebrations are, to keep the time from being one long blur.

While we are still succession planting our turnips and radishes, January is when planting under lights in my shop really starts to ramp up. I have a 4-foot-wide wire rack with 6-foot shelves. Each shelf has 2 fluorescent, tube shop lights (4 bulbs) and 2 heating mats sitting on cardboard cut to fit the shelf. I use a timer so the lights are on 12 hours each day and use a temperature controller to keep the seedlings from getting over 80F during those surprise warm days. On January 1, I start lettuce, broccoli, and cabbage. The lettuce gets transplanted February 1, and the broccoli and cabbage get planted February 15. On January 15, I start beet seeds, for planting out February 15. They can't stay in seedling trays for more than a month, or the taproot will stunt the growth when it is transplanted. On January 23, I start my favorite crop of all, tomatoes!

I have decided this year to try 6 different varieties of tomatoes from the Dwarf Tomato Project. Some of my tomatoes I pull from the garden and replace with other crops when the heat shuts down the production, around August 7th. The dwarf varieties are full size tomatoes, but they have been bred to stay under 4 feet tall, which requires less management and trellis construction. They are members of the Open Source Seed Initiative, which protects the seed varieties from being patented or controlled by anyone. Patented and protected seeds cannot be used to breed new varieties, so this initiative ensures there are genetic lines that gardeners can use to breed new varieties for our changing preferences, growing techniques, and climate. There aren't many seed companies breeding seeds for the North Texas environment; only one I know of, Willhite Seeds in Poolville (www.willhiteseed.com).

We succession plant our lettuce, salad mix, and arugula, so it is harvested all winter. Turnips, radishes, beets, and carrots that were planted during the fall are finished, but the ones that we planted in early October will be ready to harvest about the end of January. This is called "overwintering" crops and is a great way to keep growing (and eating) year-round. The kale and chard that we started in December will be ready to transplant in late January for harvest in early March. I love being a member of Cowtown Farmers Market because there are so many winter farmers that there is still lots of variety. We tend to try out all the different mushroom varieties available during winter because we have less of our own vegetables. It's a good time to try other things, as opposed to spring when we're trying to eat everything coming out of our own gardens. That's pretty much everything that's growing on around here.

Visit Shine's Farmstand on Facebook:

<https://www.facebook.com/shinesfarmstand>



RECOMMENDED LINKS

DWARF TOMATO PROJECT

<https://www.dwarftomato-project.net/>

OPEN SOURCE SEED INITIATIVE

<https://osseeds.org/>

TEXAS SUPERSTARS

<https://texassuperstar.com/index.html>