

The Central Texas Bioregion Is Bumping With Biodiversity

Travis County in Central Texas is 30°18' north latitude and 97°45' west longitude. The Texas Northern Blackland Prairies make up the majority of my bioregion but the Edward's Plateau Woodland, Llano Uplift, Limestone Cut Plains and the Balcones Canyonlands border its edges.

Classification of agroecosystems in this bioregion includes a variety of crops, cattle, sheep, grains, poultry, greenhouses, and mixed farming systems. There are a large number of backyard gardens and community gardens. Ecological energetic processes in the agroecosystem include the use of mechanization and chemical fertilizers on the non organic farms that grow grains. Intensified agriculture in this bioregion includes semi-industrial and full industrial (Altieri 1995, 50).

The growing season is about 270 days however there are crops that can be grown year round (Smyrl 2010). The Blackland Prairie is predominantly clay and the Edward's Plateau is a mix of caliche and clay. Agricultural systems include grazing systems for cattle, while there are wildflower programs in place to incorporate native species back into the land along the highways (Altieri 1995, 40). There are gradient changes where ecoregions intersect like in Edwards Plateau and the Blackland Prairies. Cropland, pasture, urban development, industrial growth, and organic farming have altered the Texas Blackland Prairies (Glenn Griffith 2007). "Less than one percent of the original vegetation remains. Restoration activities in some of the protected prairies include prescribed burning, haying, and bison grazing (Glenn Griffith 2007)."

Some examples of the biodiversity in this bioregion include native plants, grasses, trees, succulents, flowers, herbs, and cactus. Trees include Oak, Pecan, Black Walnut, Dogwood, Mesquite, Cedar, Mexican Buckeye, and Texas Ash (Texas A & M

Agrilife Extension Service 2013). Shrubs and smaller trees that can be found here include Bottlebrush, American Beautyberry, Crepe Myrtle, and Mexican Redbud (Texas A & M Agrilife Extension Service 2013)

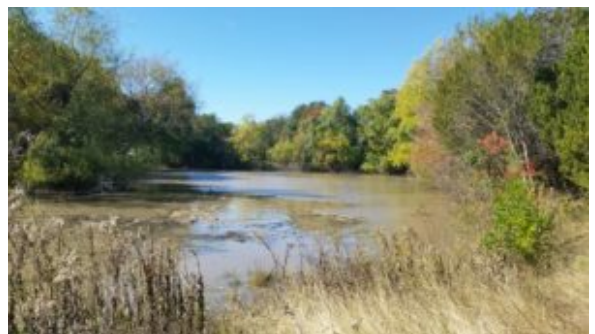
Some of the capital resources include the Ogallala Aquifer and the LCRA controls water from the Colorado River to six dams including the Highland Lakes (Lower Colorado River Authority 2014, Texas Water Development Board n.d.) An extinct volcano makes up part of the Edward's Plateau (Smyrl 2010). Soil formations are attributed to Cretaceous shale, chalk, marl and of these irregular plains, gradient streams of silt, clay, and sandy substrates are located at an elevation between 300-1050 feet above sea level (Glenn Griffith 2007). The average temperature for Travis County is 67.51°F and the average rainfall for my bioregion is 35.22 inches of rain per year (World Media Group, LLC. 2014).

Spanish settlers and the Mexican government have been a crucial part of indigenous lineage also in the Texas Blackland Prairies (Smyrl 2010). Human resources and the metapopulation include nonprofit organizations, parks, neighborhoods and east side organic farms. The ever-changing region hosts a myriad of culture, industrial development, fauna, agricultural opportunities, native and adapted flora, soil variations, geological land shifts, warm weather, light precipitation, and is a college mecca.



Just after you

cross the street to get back on the trail you are able to enjoy the beautiful maple trees turn colors in the fall. This illustrates how the landscape significantly changes within a 2 mile stretch.



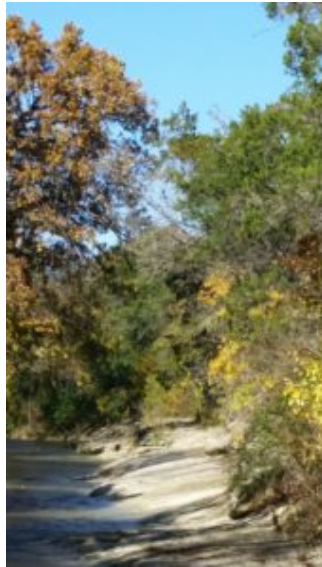
The Blackland Prairie ecoregion meets the Savannah ecoregion opening up into this beautiful wetland that is thriving as a result of habitat management.



When the river is high you can kayak alongside.



Fossilized seashells indicate oceanic activity years ago. This indicates Edward's Plateau ecoregion.



Hiking along the
bank of Walnut
Creek



Hiking with my cousin
Tabitha near the end of the
2.2 mile hike one way, at
Copperfield Greenbelt Trail
in Austin, Texas. Loop back
for a hike over 4 miles.



Balcones
Canyonland
Ecoregion near
the trailhead.

These photos were taken with my cousin Tabitha while on a hike at Copperfield Greenbelt Trail in Austin, Texas in the fall of 2015. We will cherish these memories forever as we instill her passion for adventure, nature, and life in our hearts.

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Has it really been that long?! Catching Up with New Year Recommendations

MISS YOU! As an overachiever by nature, I didn't realize that my needing to post an update to our blog was so outdated! It's been on my neverending list of to dos. I actually have piles of topics to discuss as they come up in newspapers, online articles, books, magazines, and networking discussions, and yet they slowly make their way on our site, and in stacks in my art room. As **you may have already read**, this site is an ongoing project and passion of mine that has developed from my passion for food, gardening and sustainable living. It has become something bigger. Or perhaps I'm branding so keep your eyes open.

WHAT'S BREWING?

We've also been brewing a variety of brews. Our, **'You Gourda Be Kidding Me' Porter** was titled as a contest on facebook, of which my cousin Jake, the beer connoisseur, landed it the special comical title. We made this Porter late fall and used 7 lbs of various squash and pumpkin for the blend. I baked the squash in quarter pieces with the whole spices laid on top. Then we added them throughout the brewing boil in 15 min. increments, in addition to adding 1/3 vanilla bean every 20 min over the course of 1 hour. Our seasonal brew we bottled, and mighty spendy indeed but we were able to produce about 33 bottles of a unique, spicy, sweet, robust medium dark craft beer with a 7.3% ABV. This was also the first recipe that we created and brewed together. Usually I have assisted with the process as minimally as possible but this one was the first batch my husband and I brewed 100% together. We were rather impressed at how well we work together during the process. It

went quite a bit smoother than the Friendly Neighbor Brewing nights at home. But we are a good pair in the kitchen too so I'm not surprised. This was also rewarding since their last batch became part of the lost souls of beer explosions. And a whole batch was ruined from excessive carbonation which could have been caused from fluctuating temperature changes where they were stored, apparently a common mishap for Texas according to AHS(Austin Homebrew Supply). We have a Honey Kolsch on tap that should be ready by next weekend. I got Davin an awesome thermal growler with my dividend check from REI for Christmas. Great way to give a green gift! It's insulated and will keep beverages hot/cold for at least 24 hrs it says.

GREEN GARAGE SALE? REI-buy a lifetime membership for \$20, get great deals and a dividend check of 10% back from your purchases throughout the year to spend at REI on anything you want. Another green way to take advantage of REI, check out their free programs, classes offered, and volunteering opportunities in your location. Also great company with wonderful benefits to work in a healthy and fun environment. One of our favorite REI regular events includes their garage sales, great deals on returned items from customers; shoes, bags, watches, bikes, racks, etc. Check different store locations to find out when their garage sales are happening. We've attended one in Portland, Oregon and several in Austin, Texas that had fantastic deals!

COMPOST TEA YOU SAY?

Since the fall I have also attended an invaluable Compost Tea Class at Third Coast Horticulture Supply in Austin that offered alternative methods of gardening by moderating garden techniques by monitoring, analyzing, and hosting the ideal amounts of fungus and bacteria within our backyard ecosystem. The perfect balance of the two prevents disease, pests, freezing, and heat stress among other things and also allows the plants to be incredibly resilient, strong, and much more efficient in their production abilities. No need to feed plants on a regular basis with various plant foods when the growing medium is in complete harmony by the perfect balance

of bacteria and fungus, the system feeds itself. Creating compost tea can be done a number of ways but with proper aeration(using a pump) in a five gallon bucket and a fine mesh cloth, a tea can be made while mixing medium materials and soaking them in water. There are several different formulas that one can use to create their own compost tea and you can also buy the product already made and ready to use. One may also take the compost tea mixture and apply it in undiluted measurements like an extract which can have a larger impact on the overall effect, especially on a commercial farm scale.

How to make compost tea? Yes, more on this later. If I can upload documents then I will upload the free pamphlet we received at the class titled, 'Soil Simplified: An Introduction to Your Garden's Microbial Life.' The definition of Compost Tea in this piece of literature states, "Compost tea is a brew of oxygen rich water, high quality compost, and some foods to help microbes bloom in population. " The article goes onto discuss the goal of a good tea is to "substantially increase the amount of beneficial organisms. " Compost Tea(CT) may then be used to coat leaf surfaces, inoculate compost, and restore and improve soil health through a bio-film protection barrier that keeps pathogens from feeding on the plant. "The microbes also respire CO₂ that helps fuel the plants metabolism and through usage of tea in compost or soil the biomass of healthy life is stored and converts into energy. As you may already know compost is already organic matter that has broken down over time by microbes and may be used as food aka energy, later. Adding compost to your garden adds diversity to your soil and compost varieties vary by different compositions used; essentially compost is composed of sunlight, water, oxygen, nitrogen-green and brown earth matter(leafy plants,greens, grass, etc. for green, and wood, leaves, paper, etc. for brown-just a few examples).Many people use mushroom compost-obviously excellent for contributing a mycorrhizal relationship with fungi symbiosis. Some use chicken manure, and cow manure, but a good rule of thumb is to know EXACTLY WHERE YOUR COMPOST MATERIALS CAME FROM if you don't make your own. A lot of people are easily misled by garden products that are labeled as "Organic" because they

don't understand the science of the matter at hand, for instance, Miracle Grow-Scott's, Monsanto product, advertises, "Organic Gardening Soil"-well duh, anything living is organic-here's the definition I referenced from biology-online.org below but don't believe what you see if you haven't done the research yourself. Miracle Grow-Scott's-Monsanto, the bane of our existence globally, and is far from toting the organic emblem of health. Just because your dirt says it's organic, doesn't mean that it's nontoxic, chemical-free, etc. Do your homework, I'm just scraping the surface of the subject. Research your seeds, your plants you buy at the store, seed-starts, etc. GMO vs. Non GMO to help get your head in the game. Mother Earth News is a great online resource, digital publication, or magazine to subscribe to if you're a newbie and want to put forth more effort in transforming your garden, home, lawn, life, food sources, and lifestyle. Also, the LIBRARY, I must reference it again, next to online used books and swapping good resources with your friends.

Word origin: Latin *organicus*, Greek *organikós*, *órgan(on)*.

Related forms: organically (adverb)

Organic~Definition: *noun, plural: organics*(Chemistry) An organic compound; or any substance containing carbon-based compounds, especially produced by or derived from living organisms.(Agriculture) An organic food; or any food that is *organically grown* (i.e. grown without using or applying synthetic pesticides, fungicides, inorganic fertilizers, or preservatives. *Adjective*(biology) Of, pertaining to, derived from, or similar to an organ of the body. <http://www.biology-online.org/dictionary/Organic>

Inorganic~Definition:*adjective*(1) Of or pertaining to substances that are not of organic origin.(2) Relating to a substance that does not contain carbon.(3) Of mineral, rather than of biological, origin. <http://www.biology-online.org/dictionary/Inorganic>

THAT'S RIGHT, CHEMICAL FREE 2014-I know you wanted to accomplish that goal this year! :}

Furthermore, funny thing is, once you get into the matter of

what's in your dirt, where your dirt came from, what dirt your food grew from, what the dirt and plants were sprayed with to keep things growing, it'll make you sick to your stomach so just make sure to do your research if you are really interested in becoming an "Organic Gardener." In order to slap on the label you need at least 7 years of chemical free gardening under your belt on your land in addition to all the other legislative hoops you must jump through the FDA and USDA for Organic certification. You can do just as good of a job as a chemical free, "organic" gardener by making sure that everything that goes onto your lawn, garden beds, water, etc. is eco-friendly, non-toxic, and natural based. That's right, no more crap sprayed on your garden beds AND LAWN that kills fish, birds, livestock, children, pets, and adults-don't worry, there's enough studies to prove that, it does make a difference. Just because you don't feed your edible plants and herbs toxins doesn't mean they won't get what you sprayed or fertilized your grass with, NOT Dillo dirt(Travis county human waste with pharmaceuticals in it)-Organics By Gosh sells this misleading product too, ironic, don't ya think? NOT Roundup-our poor ecosystem! NOTHING TOXIC ON YOUR HOMESTEAD PERIOD, EVER! Did I sound a bit concerned on the topic? Do you really want that in your drinking water? Didn't think so, oh, well, it definitely depends on where you live but heads up folks if you're in Austin, part of your water may come from the Colorado River, and guess where those tire rims, styrofoam and non recycled water bottles, and kid toys go to die-in the lakes, streams, rivers, and oceans, if not in landfills, and natural habitats already. If it's not petroleum based ingredients in your body, home and garden products, then it's chemicals that you don't know how to pronounce, and toxins that you don't want in your body or the environment that you live in. Do ya think our ancestors had all that garbage hundreds of years ago to live sustainably? Heck no, did they survive, hell yeah they did. And without all the pills to boot, don't even get me started, jk. Get over the illusion that chemicals are not bad for you and you'll be a lot better off. Promise. Trust the millions of people who have died on behalf of the multitude of discussions that have spawned on behalf of our exposure to man made ingredients, not derived

from plants. There are always other options before using chemical agents that can end your life or blind you. Many of you already know what I'm loosely and somewhat lightly babbling about, those of you who are wanting to learn more? Get your hands on some documentaries via Netflix, library, or search for them for free online. Some titles of films to watch that might surprise you, not in any order, 'Corn, Death on a Factory Farm, Food Inc., Dirt. The Movie, Supersize Me which I've mentioned before...The Cove, there's a bunch that are easily accessible on YouTube for free too. Here's a quick link to [some reviews from about.com](http://documentaries.about.com/od/populardocsubjects/tp/Food_and_Nutrition_Docu.htm) http://documentaries.about.com/od/populardocsubjects/tp/Food_and_Nutrition_Docu.htm

On a positive note, I'd like to end my post with some uplifting insight and more positive information since I didn't foresee myself going on a last minute rampage. Also in the mean time, start your own research on ways to improve your garden and visit Third Coast Horticulture Supplies in Austin, Texas! There's also one in Muskegon, Michigan but I'm not sure if they know each other or not. The owner Shawn is a walking encyclopedia in the field and will show you how to test your samples under a microscope.

Other Must Reads for the NEW YEAR 2014!

A good start and a good read to help you grasp the concept of Compost Tea in it's entirety? Pick up a copy of Teaming with Microbes *The Organic Gardener's Guide to the Soil Food Web* Revised Edition by Jeff Lowenfels & Wayne Lewis and check out their website.

Sleeping Naked is Green by Vanessa Farquharson-got this awesome find at Half Price Books for \$4 and it's a gem of knowledge. Even a bit ahead of herself at the time, this Canadian writer vowed to green up her life in 366 days and wrote about it. Great ideas, and comical events took place in her book and is a must read for autobiography, sustainable, earth lovers, and those wanting some new green ideas, published in 2009. A lot of wonderful references, and ideas for you to take as you embark upon your new year goals, or help you make some if you haven't already.

Texas Bug Book by Garrett & Beck, yes, we often wonder what strange new insect has come to taunt us throughout the growing season, this one is pretty handy to have by your side. Got ours used at Half Price Books, but also Amazon has used copies for sale.

Beauty By Nature by Brigitte Mars-make natural products for you and your home from herbs you can grow in your garden. This is a gem of a find. Easy to follow, read, and use.

GAIA's GARDEN by Toby Hemenway-If you are looking for your foothold in the permaculture world this is the perfect book to get your feet wet and dirty.

Texas Mushrooms by Metzler, Metzler, and Miller-this is almost \$30 or so, but if you are a mushroom forager in Texas, get yourself a copy. Also the National Audubon Society Field Guide to North American Mushrooms is a great handbook too.

Storey's Guide to Raising Chickens by Gail Damerow-How to care, feeding, housing, health, this book covers a lot of different topics that relate to your flock, so I was pleased when I was choosing, one book to buy. Again, there is countless info online, and in magazines but we've been pleased with this reference.

Texas Home Landscaping including Oklahoma by Greg Grant and Roger Holmes, includes drought tolerant plants, and natives, etc. They have a series that includes Cali, Mid-Atlantic, Midwest, Northeast, Northwest, and Southeast. Some of which include parts of Canada and British Columbia.

I like the local Agri-chapter free color publication of native plant species for Travis County available for more useful native plant selections, and non-native plant options that do well in the area. The last one they published was in 2009 I believe. Local Garden Centers in and around Austin still have copies available. Check out this link <http://travis-tx.tamu.edu/agriculture-natural-resources/>.

Good luck to you on your journey this year! May you encounter invigorating new moments to shine and be inspired. As I continue to study in the Graduate program at Texas State with

my Interdisciplinary Studies in Sustainability I will keep you posted. I will start adding more information to the different site topics too. Gardening and Food recipes will be of focus in the beginning of the year. Cheers, and straight ahead!

Stargazing, Mushrooms, Maples, Cliff Jumping, and Texas Adventures

























Some of the photos are from Brownwood State Park, Texas. Also

in San Saba, Texas.

We spent the past weekend exploring a new state park, Lost Maples in Vanderpool, Texas. The park is rather open which prevents privacy but ideal for RVs and each site provides a covered picnic area among the 30 sites; \$20 a night. They do have six primitive sites available; \$10 a night. This park really reminded me of Colorado Bend State Park because of the exquisite display of the Milky Way at night and literally every star and planet was visible. Words cannot describe the ambiance of the wilderness at night here.

We used our canopy tent frame and our mosquito screen as a makeshift tent. After using our fine mesh backpacking MSR tent and our 4 season car camping Marmot tent we have found that the minimalist approach, one step above sleeping in the open with no covering, is coolest for Texas camping. So we plan to build a pcg frame for this reason. We used our recycled pop bottle rug I acquired from Gaiam many years ago. It has proved to be the perfect addition to taking to the beach, hanging as a shade curtain at the farmers market, and for laying on the ground to establish a cozier campsite. It's light, ventilated, waterproof, and one of the most ideal items to have for your outdoor spaces.

What's most popular at Lost Maples State Park is the vast array of fall color changes due to the fact that there are acres of Maple trees dispersed throughout the park. Maple trees are hard to find in Texas and the majority of the state does not embody the fall color changes that the cooler parts of the U.S. do. They have a status update foliage report on the fall color changes so that visitors can come peruse the park in it's prime on the Texas State Park website-Lost Maples State Natural Area page. Although we went before witnessing the transition of chlorophyll in action, there were just a few trees that have changed and were changing, less than 10 from what saw. They recommend visiting mid week in the fall, I'm guessing late Sept-early November is going to be ideal this

year from what we observed. We have seen some beautiful color changes in the trees in McKinney, and Northeastern Texas, while headed to Arkansas. This may be the case in Eastern Texas and perhaps Northwest Texas too.

We were able to cross this park off our bucket list of State Parks in Texas to visit and wouldn't mind going again to witness the peaking of the fall turn. We saw a lot of juniper and cypress beds which we feel this would also be a great place to find Morel mushrooms during the wetter times of the year, spring, and fall. We have learned this from the founder of the Texas Wild Mushroom Group. If you are into mushroom hunting in Texas this is a good start to becoming more in the know. We were overzealous to learn that we can actually acquire Morels here! Wohoo, this Michigander has found Morels and Maples in Texas, peace at last.

We went for a 5 mile hike the following morning and it was a pleasant excursion that ended near a spring fed pond (we hiked the East trail and the Maple trail.) Boy was that refreshing, I went swimming while Davin sat atop a cliff. I finally was inspired to jump off it into the waters below after another Texan showed me that it was safe. I'm guessing I was 30 feet up or so. It was exhilarating for sure. I've learned that the older I have gotten, the less nerve I have! Davin recorded my plight on his outdoor extreme camera, which consisted of me talking myself through the jump for the first 10 min, boring, and by the time I jumped I had a crowd of 30 or so watching. No backing out then, and alas I did it! "So dramatic," my husband said! If you know me you know this to be true. Ha ha. We recommend this park, you will enjoy the drive in and out, the winding roads submerged between rock reminded me a little of Pennsylvania and Colorado.

We stopped through Bandera, Texas on the way home. This town claims to be the Cowboy Capital of the world. We witnessed the tail end of a western enactment of Jesse James robbing a bank at the Cowboy Festival, over Labor Day weekend. We sipped on

homemade sarsaparilla soda and talked to local vendors. We went to a local restaurant that was ok but was delved in historical roots, nothing to write home about. We wished we had waited to eat because while driving through Boerne we stopped at our favorite local brewer, The Dodging Duck Brewhaus, and man, their food and beer is delectable and a place for your foodie & beer bucket list! They had a pumpkin ale on tap that resembled the taste of Chai in the form of a beer, it was exquisite. Their Nitro Stout was full of body too and Davin enjoyed their 8 time hopped IPA and their Pale Ale on tap. We had the pleasure of meeting the owner Keith and he shared his stories of playing the Trombone at the reunion of the UT Longhorn Band last Saturday in Austin. The first time we visited we met with some old friends of mine from Michigan who were in town. We had a Vanilla Pecan Ale from what I recall then, again, unparalleled to others we've tasted in Texas. Don't miss this gem of a find, especially if you live in Texas!