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 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 Backland 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 damns 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 instil her passion for adventure, nature, and life in our hearts.

Bibliography

Altieri, Miguel A. Agroecology: The Science of Sustainable Agriculture. Westview Press, 1995.

Glenn Griffith, Sandy Bryce, James Omernik, Anne Rogers. *Ecoregions of Texas*. Austin, December 27, 2007.

Lower Colorado River Authority. *Energy, water and community services for Central Texas.* 2014. http://www.lcra.org/about/Pages/default.aspx (accessed October 30, 2014).

Rose, Peter R. "The Walter Geology Library, The Balcones Escarpment: Pipeline Oil Spills and the Edwards Aquafiers, Central Texas." The University of Texas Libraries at Austin. January 31, 2012. http://www.lib.utexas.edu/geo/balcones_escarpment/pages163-183.html (accessed October 30, 2014).

Smyrl, Vivian Elizabeth. "Travis County: Handbook of Texas Online." Texas State Historical Association: A Digital gateway to Texas History. June 15, 2010. http://www.tshaonline.org/handbook/online/articles/hct08 (accessed November 24, 2014).

Texas Parks and Wildlife Department. Rare, Threatened, and Endangered Species of Texas. http://www.tpwd.state.tx.us/gis/ris/es/ES_Reports.aspx?county=Travis (accessed November 24, 2014).

Texas A & M Agrilife Extension Service. *Native and Adapted Landscape Plants*. 5th. Austin: Grow Green, 2013.

Texas A & M University System. Agricultural and Mechanical College Extension Services. http://aggie-horticulture.tamu.edu/vegetable/guides/the-crops-of-texas/appendix-1-descriptions-of-geographic-regions-in-texas/ (accessed October 31, 2014).

Texas Water Development Board. *Major Aquifers*. http://www.twdb.state.tx.us/groundwater/aquifer/major.asp0 (accessed November 11, 2014).

World Media Group, LLC. "Travis County Weather." *USA.com.* 2014. http://www.usa.com/travis-county-tx-weather.htm (accessed November 24, 2014).

SNAP, WIC, and Nutrition Build Community Based Food Systems and Food Security

Turning community supported agriculture into agriculture-supported community would allow community food security to thrive within the local food movement (Ackerman-Leist 2013). Community food security targets the local population and strives to, "make healthy, fresh food available to individuals, organizations, businesses, and government entities (Ackerman-Leist 2013)."

The food justice movement is present in Austin with organizations like Urban Roots, which targets lower-income families and troubled teens. The Sustainable Food Center (SFC) has created Farmer's Market Incentive Programs (FMIPs) through the Farmer's Market Nutrition Program (FMNP) to increase local food access among nutrition assistance beneficiaries (Jeanie Donovan 2013). They have also targeted mobile vending, community-based farm stands and grocery stores to reach beyond the farmers market (Jeanie Donovan 2013).

New policy recommendations include increasing electronic transfer benefits (EBT) availability at local food retail locations and making it mandatory for all farm stands and farmers markets (Jeanie Donovan 2013). This will be one of the biggest challenges because out of seventeen farmer's markets/food stands

in Austin only six are EBT equipped. Additionally Supplemental Nutrition Assistance Program (SNAP)enrolled and WIC (woman, infants, and children) customers must be included in all the programs and order for it to be locations in the effective (Jeanie Donovan 2013). However in order to be SNAP qualified one must apply to determine their eligibility and TBB (The Benefit Bank) assists our diverse population (Jeanie Donovan 2013). Installing EBT technology with the USDA's Food and Nutrition Service (FNS) program requires excess funding. Targeting public and private sources, available grants, annual reporting and reapplications can help sustain funding possibilities (Jeanie Donovan 2013).

Since other cities show the benefits of increased sales between SNAP customers as a result of FMIPs the SFC believes that this would be a successful program here. SFC doubles the value of SNAP, WIC, and FMNP benefits totaling up to \$20 per market per day through the Double Dollar Incentive Program (DDIP), but only for fruits and vegetables (Jeanie Donovan 2013). Consumers can save keep their incentives to use on other days as long as they use them by the end of the year.

By increasing the frequency of access for low-income consumers to obtain locally produced fruits and vegetables, the programs will redirect consumer spending to local agricultural producers (Jeanie Donovan 2013). This could also provide environmental opportunities like reducing food loss in conjunction with local composting programs and gleaning opportunities, as well as turning excess food into animal chow. It will decrease energy output by cutting transportation costs and minimizing distribution beyond a fifty mile radius. Direct market sales and

relationship development between consumers and farmers will be socially beneficial. Additional education benefits will help individuals learn new life skills; understand where their food comes from and empower better nutrition decisions.

Works Cited

Ackerman-Leist, Philip. Rebuilding the Foodshed. White River Junction: Chelsea Green, 2013.

Jeanie Donovan, Amy Madore, Megan Randall, Kate Vickery. Farmers Market Incentive Program. Policy Recommendations for Austin, Texas, Austin: Lyndon B. Johnson School of Public Affairs, 2013.

Support these Organic Farms to Help Transform Our Foodshed

My bioregion has a lot of growth opportunities and has made great strides within our local foodshed. The biggest sustainable access that anyone can have in relation to their local foodshed is to grow their own produce, like the veggies we grew (shown above) from our organic garden! The Sustainable Food Center has been a key player in transforming our community. They have advocated change, helped impoverished communities have access to healthier food choices, provided resources and education, and launched necessary

services. They are available at some of the Austin farmers markets in some impoverished areas and have potential growth opportunities to branch out to other neighborhoods. The Capital Area Food Bank recovers a lot of food from many restaurants and farms and distributes it to poor communities throughout this region (Texas 2014).

There are several organic farms in Austin, some of which have been around for quite some time. Tecolote is an organic family farm a few miles from my home in Manor, which has been the longest CSA distributor in Texas (Kramer 2014). Their engagement in the food movement is through their contributions in living sustainably, local restaurant/co-op distribution, farmers markets in different counties, the slow food movement. and biointensive/sustainable/civic agriculture. These are some of the things I learned from this incredible farm by volunteering and working for them. As a CSA shareholder or farmers market shopper you will be pleased to have access to specialty smoked peppers from David's famous outdoor wood smoker and other unique heirloom varieties that are boomtastic! Chat about your next dish at the market with Katie!

Green Gate is an organic family farm about ten miles from my house that focuses on civic/sustainable agriculture, CSA distributions, some restaurant wholesale, meat/honey/dairy shares on-site from other farms, host to a bee colony from an offsite beekeeper to share the pollination benefits, promote community development and education through their New Farm Institute (Flynn 2014). I've had the wonderful opportunity to work and volunteer for Green Gate! Learning from Farmer Chip and Farmer Erin is a unique

and magical experience. Something that you don't want to miss! Help support them in building their NFI infrastructure and site. Donate!

These two farms are very similar, especially since they are strong family farms, yet their focus is somewhat different. While Tecolote focuses on their direct market reach through face to face networking, Green Gate focuses on educating the community on food ethics. Not to sound exhaustive, I'm trying to simplify. They both represent farm gate to food plate, instil historical character at their farms and equally share traction in their fields. Green Gate has integrated permaculture design at their farm sites and they are open to the public to learn, offer children's farm camp programs, and alternative educational curriculum opportunities to local schools. They are the only organic farm in Austin that focuses on this. Green Gate provides additional SNAP benefits from the government by doubling the voucher from \$10 to \$20 per day for produce when used on the farm (Banks, 2011).

There is a crucial demand in any city or town for people and children to have access to learning about where their food comes from. That ignites interest which can lead to change. Not all organizations who are involved in the foodshed allow others to learn from them through first hand experience. Although you can volunteer at several of the organic farms within this bioregion, that doesn't mean that people are begging to do so, especially if they don't care about the food movement or know why it's important.

Urban Roots in Austin is another organic farm with a civic/sustainable agricultural drive that teaches struggling teens a better way of living. This includes preparing food, field work, advocating change, and they

team up with other local businesses to fundraise and raise community awareness for their mission. They stand out as leaders in their field in this arena and use their community engagements at the market, SXSW and other festival exposure, farm dinners, CSA, and fundraising events to propel their grassroots movement. Urban Roots attacks food security issues by providing produce to poor communities. Support their social movement, community impact, and farm! They are the funnest farm to volunteer for! Volunteer!

Although not all of the local organic farms have a mindset to transform lives through educational opportunities teaching volunteers or community members, they do in their face to face interaction at farmers markets, website exposure, grassroots involvement and CSA distribution. The need for expanding SNAP benefit access at all the farms and providing mobile access to local, fresh foods in different impoverished neighborhoods is imperative to closing the gap between different populations who may be missing out on the local food system, necessary sustainable food transitions and food security.

For more information about volunteering at a local Austin or Manor farm please review my Green Thumb-Texas Directory page. Or talk to your local farmer at your nearest food hub! Building new relationships through Community Supported Agriculture is a great place to start! Find a local CSA farmshare near you!

Bibliography

Banks, Karen. *Central Texas Food Shed Assessment*. Central Texas Food Shed Assessment, Austin: Sustainable Food Center, 2011.

Flynn, Erin. *New Farm Institute*. 2014. http://newfarminstitute.org/ (accessed December 22, 2014).

Kraemer, Katie, interview by Kristin Kay Schultz. *Tecolote Organic Family Farm* (November 14, 2014).

Texas, Capital Area Food Bank of. *Food Systems*. 2014. http://www.austinfoodbank.org/advocate/issues-food-systems.html (accessed December 22, 2014).