

# Spring Chicks, The Natural Way



Chicks A Few Days Old









Chicks are 3-4 weeks old

This marks the start of our sixth flock to date and the fifth spring that we enter raising chooks as chicks. What's different about this year however is that for the first time we hatched our own. The natural way. We must tell you that it has been extremely exciting and rewarding to watch the transformative process. From the time our broody Australorp plucked out all of the feathers from under her belly to the dawn we found the first chick chirping in the nesting box along her side.

In the past we have always purchased our chickens from other breeders. Throughout the process we have experienced both joy and pain. We have learned to become very resilient flock shepherds through the multitude of casualties we've experienced and for a number of reasons which we suspect. Chook owners know more over time, but even after we have

conducted a necropsy, sometimes you just never know why your little feather friend died. Then we remember natural selection and survival of the fittest doesn't always make sense. Nature has a way of showing you tiny details and intricacies of life that may have gone unnoticed before, when everything appeared to be perfect. It is under the ruffled feathers that you find many questions left unanswered. And yet somehow you have the urge to try again.

So, this season it is extremely rewarding for us to watch mama hen take ownership of 11 brown, white, and blue eggs in her nest. We watched as a few more eggs were laid each day in the same space by the Leghorns, Barnevelders, and Ameraucanas. Only 7 hatched and we buried the others in the garden. Each one of them is unique in their own way by the day of the week they were born which earned them names of which to keep.

The first egg that hatched was blue and an Ameraucana. It had been at least twenty-one days when we noticed a fracture in the shell. Over a period of more than six hours she pecked her way out of her shell. Chicks can live for four days after they've hatched on the nutrients supplied from the inside of their shell. Remarkable the way that nature works eh?

One by one they hatched and we brought them into their temporary brooder. The goal was to

reintroduce mama hen to her chicks after they'd all hatched, but she was so stressed out from the extensive incubation period that when she left the nesting box we could tell she was relieved. So we let her find her zen again to sow and scratch in peace.

The youngest chick is nearly two weeks behind the oldest and Thursday, the only Australorp that hatched was born January 7th. She took a couple of days to get out of the eggshell. She was exhausted and we were not sure that she'd pull through but shorty is hanging with the best of them today. Sunday, Ameraucana the first was born January 27<sup>th</sup>, then Wednesday Ameraucana the 2nd (30<sup>th</sup>), Sunday the first Leghorn (3<sup>rd</sup>), and two Leghorns hatched on Monday (Jan 4<sup>th</sup>). One Barnevelder hatched on Tuesday (5<sup>th</sup>). By now a few of them are about a month old.

For more information on raising your own flock we highly recommend:

Harvey Ussery *The Small-Scale Poultry Flock*

Gail Damerow Storey's *Guide to Raising Chickens*, and *The Chicken Health Handbook*

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# The Total System Approach and Biodiversity

The **total system approach** discourages “treat-the-system” applications that don’t provide sustainable solutions for ongoing pest management that mimics nature. The key to sustainable biodiversity within agroecosystems denotes a balance of natural effectiveness by indigenous populations, multitrophic level interactions, plant mixtures, soil microbes, existent plant defenses, and species (W.J. Lewis et al. 1997).

The total system approach encapsulates the management of the entire ecosystem on the farm to include minimal soil disruption, sufficient water uptake, cropping solutions, and weed availability to allow flora and fauna synergy within the environment and surrounding communities. The biological compositions of plants trigger responses to herbivores and their enemies. While some release natural toxins to discourage uptake, others exert chemicals that attract beneficial insects and parasites to dismember their opponents (W.J. Lewis et al. 1997).

The total system approach also complements the diversity of the landscape, promotes energy conservation and nonrenewable resources, sociological benefits for employment, public health, and a farmer’s quality of life. The overall downside of pest management strategies are that biological, chemical, and physical therapeutic tools are our leading solution for managing pests, instead of using natural methods that neutralize problems over time. Being patient enough to balance pest organisms by embracing naturally recurring synergies within biodiverse environments long enough to allow them to naturally adapt, instead of eliminating pests all together, is one of the biggest challenges that we face when taking on the total system

approach (W.J. Lewis et al. 1997).

While the total system approach would be extremely beneficial to my bioregion and Texas in general, agricultural traditions in my life place are not necessarily privy to sustainable techniques. Due to the fact that sustainability is misinterpreted and not enough research substantiates why it is better (Becker 1997, 6), I think that many conventional farmers in Texas just want a quick fix so that they can turn a profit. Perhaps through their eyes, the total system approach doesn't make the same guarantees that other pest management strategies do so they fear that it's just too risky.

#### Works Cited

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## 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.



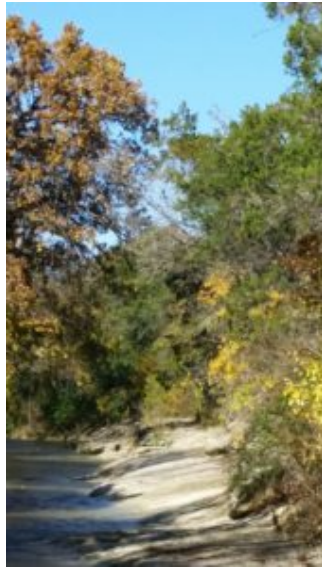
The Blackland Prairie ecoregion meets the Savannah ecoregion opening up into this beautiful wetland that is thriving as a result of habitat management.



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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