

# Agriculture Newsletter

COLORADO COUNTY

March 2018

TEXAS A&M  
AGRI LIFE  
EXTENSION

8+ CEUs  
inside

## Lichens: Not Harming Trees for 400 Million Years

Lichens (pronounced “like-ins”) are often falsely blamed for killing trees and shrubs. However, lichens have been an important part of every landscape around the world for a long time. The earliest fossil record of lichens is dated at 400 million years old. Lichens can be found in almost all ecosystems around the world; from the frozen tundra of North America, to the great Saharan desert, the rainforests of the Northeastern United States, the tropics of Central America, and the harsh Himalayan Mountains. Lichens are present both at the beginning of life and after it has ended.

For 150 years scientists believed that lichens were a symbiotic relationship of just two organisms: a fungus and a type of algae. The fungal species are actually more closely related to animals than to plants, and provide the structure of the lichen. The algae conducts photosynthesis which feeds both itself and the fungus. However, recent research from the University of Montana found that there is often a third organism present in lichens: yeast. It is thought that the yeast may offer some protective services, like in one lichen species that was found to produce toxic vulpinic acid.

Because of this symbiotic relationship, lichens can grow almost anywhere: on a rock, a decaying log, a brick house, branches of trees, even on metal siding. Lichens get all of their water and nutrients from the atmosphere, and thus are not parasites of trees or shrubs. They are often noticed on trees in poor health, and then falsely blamed for causing the decline. It is more likely that the lichens were there all along, but we never noticed them because the tree had leaves. It is also possible that the loss of leaves encouraged the growth of lichens as it provided more sunlight and less interception of rainfall. This means that lichens are often a *symptom* of tree decline, and not the *cause*.

Some lichens grow where nothing else will, and may emit small amounts of chemicals that speed the degradation of stone, thus beginning the first step in soil formation. Lichens in the frozen tundra actually make up the majority of the biomass that is produced, thereby making them an important part of the diet for some animals. Studies suggest that the lichen’s ability to absorb nutrients from the air and eventually release them to the soil results in a considerable net increase in nutrients to that ecosystem. Lichens are terrific bio-indicator species. Since they absorb water and nutrients from the atmosphere, they can be susceptible to air pollution and have been used to map areas with high pollution levels. Lichens grow slowly, and their size has been measured to estimate the date when humans last worked on the statues of Easter Island. Although their nutritional value is very low, lichens have – in the past – been ground and added to flour to make it last longer. The “Manna” from the Bible may have been a species of desert lichen, and some lichen species are still considered a delicacy in Japan. A few species of lichen are poisonous – one species was reportedly used to kill wolves in Europe. Still others were used as natural dyes, perfumes, or for medicinal purposes. During dry weather, lichens may lose all of their water and become so dry that they are brittle. Broken pieces may actually fall to another location and grow into new lichens. When moisture returns to these dried organisms, they absorb the water and resume growth.

In short, lichens are not killing your tree and do not need to be sprayed. In fact, lichens play a critical – albeit quiet - role in many ecosystems. Most of this information came from the Lichen Herbarium at Arizona State University. For more info: 979-732-2082.



Several species of lichens inhabit a tree outside of the Extension Office.

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## Upcoming Events & News You Can Use

### Drought Hardy Loblolly Pine Seedlings

The Texas A&M Forest Service is in the process of ordering drought hardy loblolly pine seedlings for area replanting efforts for the 2018-19 planting season. These seeds come from a select stand of old, drought-hardy Loblolly pines in the Bastrop State Park. Arborgen Nursery will need to know what our seedling needs will be for the coming year so they can begin growing out those seedlings. Contact Daniel Lewis at (979) 324-8416 <http://tfsweb.tamu.edu> if interested.



### Multi-County New Landowner Series - Pond Management **March 16, 2018**

The AgriLife Extension Service in Austin, Fayette, Washington, and Colorado Counties have teamed to offer a series of educational programs which will assist new landowners with the concept of agriculture production and rural living. The events are open to anyone - not just new landowners.

The March program will cover private water impoundments, also known as Ponds; construction, stocking, management, weed control, and clearing muddy water. It will be held at the Fayette County Extension Office, at 255 Svoboda Lane, La Grange. Cost is \$20 per individual unless you have signed up for the series. Registration will begin at 1:00pm and the program will run from 1:30 - 5:00pm. **Three (3) CEUs** will be provided for private pesticide applicators. If you have an aquatic weed that you would like identified, you are encouraged to bring a FRESH sample in a jar or other sealed container. For more information: 979-732-2082.

### Cattle Raisers Convention **March 23-25, 2018**

The Cattle Raisers Convention will be held in Fort Worth **March 23-25, 2018**. This event is open to everyone and they don't have to be a TSCRA member to attend! This year will offer 35 hours of practical instruction, for beginners and advanced operators that will provide practical, real-world information. It will feature the largest Expo in the history of Cattle Raisers Convention with acres of equipment, technology and information under one roof. From our indoor shooting range to world-class exhibitors, the Expo has something for everyone. For more information or to register visit [www.cattleraisersconvention.com](http://www.cattleraisersconvention.com) or by calling 800-242-7820. For a free expo day pass go to [www.cattleraisersconvention.com](http://www.cattleraisersconvention.com) by using the code **EXPO2018**. Live cattle handling demonstrations and hands-on learning will take place inside the Expo. The Expo is open to all ranchers, landowners and cattle industry participants.

### Wildlife Tax Valuation Workshop **April 6, 2018**

Texas A&M AgriLife Extension and Texas Parks and Wildlife will be hosting a Wildlife Tax Valuation Workshop on **April 6** at the Colorado County Fairgrounds, 1146 Crossroads Blvd, Columbus. Registration begins at 8:00 a.m. This program is designed to help landowners who are transitioning from an Agriculture exemption to a Wildlife exemption. Topics include: Requirements to qualify for Wildlife valuation, Ensuring your wildlife management practices are successful, Choosing target species, Habitat evaluation and Filling Management Plans & Annual Review. Presentations will be from 8:30 am to 12:00 pm. Following the presentations, there will be individual consultations with Texas Parks & Wildlife Biologists to develop your plan. It is requested that if you wish to develop your plan with a biologist, that you bring an aerial/satellite map of your property and your lunch. Class is limited to 30 participants. There is no fee to attend. Call 979-732-2082 to pre-register.



### Bluebonnet Master Gardener Association (BMGA) 2018 Fruit Tree Sale

Orders will be accepted now through **April 2, 2018**. Trees will be available for pick-up at the BMGA Plant Sale on Saturday, **April 14, 2018** at the Sealy Spring Fest Santa Fe Museum Grounds (211 East Main Street). Payment is due upon pick-up. We ask that if you pre-order please make sure you are committed to the purchase as we will be bringing the trees in specifically for the pre-sale and do not want to have trees remaining unpaid for. Find the order form and list of varieties at <http://bluebonnetmastergardener.org/forms/>.

## **Multi-County Fruit Tree Seminar [April 13, 2018](#)**

Do you have a fruit tree and have questions on how to get it to produce fruit? Here is your chance to answer those questions and to learn what is needed to have a successful and enjoyable experience. We will discuss these topics and many more on Friday, **April 13th**, at the Winedale Historical Complex at the Dolph Briscoe Center for American History in Winedale. Monte Nesbitt, Extension Horticulture Associate, will be the main speaker and will cover a wide range of topics, including varieties, selection, pruning and planting.

This program is a multi-county effort that includes Austin, Colorado, Fayette, and Washington counties. Refreshments and handouts will be provided. Registration is from 1:00 pm - 1:30 pm and the program will run from 1:30 pm to approximately 5:00 pm. A registration fee of \$20.00 will be charged at the door to help defer the cost of refreshments and materials. **Two (2) CEU's, in the general** category, will be available to pesticide applicators. To pre-register for the event, contact the Texas A&M AgriLife Extension Service Office of Austin County at (979) 865-2072, or visit our Events Registration page.

Winedale Historical Complex is a division of the Dolph Briscoe Center for American History, the University of Texas at Austin. Winedale is located at 3738 FM 2714, four miles from Round Top, Texas. Take FM 1457 to FM 2714. You can visit the website at <http://www.winedale.org/>

## **Grass-fed beef conference set for [May 31-June 1](#) at Texas A&M**

COLLEGE STATION – Producers interested in learning more about grass-fed beef as well as potential marketing opportunities will receive in-depth instruction at a **May 31-June 1** conference at Texas A&M University in College Station. “This is a comprehensive program covering all aspects of grass-fed beef production,” said Dr. Ron Gill, Texas A&M AgriLife Extension Service beef cattle specialist in College Station and conference instructor. “We will discuss cattle types best suited for grass-fed beef options as well as sustainable production systems. There will also be information and demonstrations presented on carcass fabrication and determining beef cutout value. Topics to be discussed include: Understanding niche markets: What really constitutes natural, grass-fed and organic beef production; Forage-based nutrition for cattle: The fundamentals of growing forage in Texas; Bridging nutritional gaps in Texas due to deficiencies in forage quality or quantity; Managing pastures for improved cattle performance; Cattle types suited for grass-fed beef; Preventative herd health: Managing the health of cattle targeted for niche markets; Carcass fabrication ... a demonstration; Consumers and their expectations and A Taste of Texas Beef: Marketing a unique product.



Registration is \$250 through **April 15** and \$275 after. To register online, visit <https://agriliferegister.tamu.edu> and enter keyword “grassfed” or call 979-845-2604.

## **Generation Next School - New Opportunity!**

The Generation Next curriculum targets adult children and grandchildren of landowners who want to get involved in the family ranch, or new landowners. This online course will introduce a new topic every week for three months (12 total) and you will be able to work at your own pace. Generation Next is open to all landowners, but may be especially interesting to those who are new or recently have inherited land. The weekly topics only take 1 hour and can be done on your own time with your own computer! Classes start the week of **Feb. 18<sup>th</sup>** and run until **May 12<sup>th</sup>**. During **May 3-4**, an optional, in-person 2 day session will be held for all participants to gain hands-on experiences. Program features: Discuss business types, tax info, & insurance needs; Learn about financing programs and options; Gain ideas for operations you can add to an existing ranch; Learn options for setting up grazing & wildlife leases; Exposure to all the latest land management tools & techniques; Taught by professionals in each field and topic. Registration is \$120. You can register online at: <https://agriliferegister.tamu.edu/ESSM> or you can call 979-245-2604. For more information, email [megan.clayton@ag.tamu.edu](mailto:megan.clayton@ag.tamu.edu) or 361-265-9203.

## **Ranch Management University; April 2 - April 6**

The Ranch Management University is an intensive 5-day event targeting new or inexperienced ranchers and landowners and covers the fundamentals of soils and soil fertility, forage establishment, pasture management, and utilization by livestock. Basic livestock management practices such as castrating and vaccinating calves are demonstrated. Grazing management, stocking rate, and body condition scoring are also highlighted. Additionally, several wildlife management topics are covered for those interested in managing white-tailed deer, turkey, quail, feral hogs, and farm ponds. Approximately one-half the workshop involves lectures and discussion, with the remainder consisting of the field demonstrations of various how to methods of soil sampling, planting, calibrating sprayers, and inoculating legume seed. Various forage species, including bermudagrass, small grains, annual ryegrass, and clovers are studied by workshop attendees. Additional demonstrations covers deer necropsy, hog trap management, and pond fisheries management. The course will begin at 12:20 pm on Monday, **April 2, 2018** and conclude at noon on Friday, **April 6, 2018**. The workshop will be held at the G. Rollie White Visitor's Center in College Station. Cost is \$500 per attendee. NOTE: all meals (breakfast, lunch, dinner and snacks) and an RMU workbook with all Power Point presentations, contact information, glossary, etc. and a flash drive containing hundreds of relevant publications are provided for this cost. For more information contact Linda Francis: 979-845-2425 or visit

**[forages.tamu.edu/workshop.html](http://forages.tamu.edu/workshop.html)**

## **Multi-County New Landowner Series - Weed and Brush Control, April 20**

The Texas A&M AgriLife Extension Service in Austin, Fayette, Washington, and Colorado Counties have teamed to offer a series of educational programs which will assist new landowners with the concept of agriculture production and rural living. The events are open to anyone - not just new landowners.

The April program will address Weed and Brush Control on **April 20th, 2018**. Attendees will learn why we have weeds and brush, integrated management practices, the proper use of herbicide on weeds and brush, how to avoid herbicide use, identification of common weeds and brush species, and how to avoid weed and brush issues in the future. There will also be a sprayer calibration demonstration and well as a brush treatment demonstration. The program will be held at the Colorado County Fairgrounds, 1146 Crossroads Blvd, Columbus. Cost is \$20 per person unless you have signed up for the series. Registration is at 1:00pm and the program will run 1:30 - 5:00pm. **Three (3) CEUs (2 Gen, 1 IPM)** will be provided to licensed pesticide applicators. For more information, call 979-732-2082.



## **Study Finds Bumble Bee Decline Linked to Feral Honey Bees**

The European Honey bee (*Apis mellifera*) is raised in managed colonies for the pollination of certain crops and for the production of honey. Occasionally these populations leave their managed hives and establish a hive in the landscape. A study published in 2016 found that native bumble bee populations declined in response to an increase in feral European honey bee colonies. A decline in both species was noted during years of insufficient spring rains. But in favorable years, honey bee populations increased while bumble bee populations decreased. Dr. Diane Thomson of Claremont McKenna College in Central California monitored honey and bumble bee foragers from 1999 to 2014. In 1999, feral honey bee populations were low due to the Varroa mite, a parasite primarily blamed for Colony Collapse Disorder. From 1999 to 2006, feral European honey bee numbers increased substantially. From 2006 to 2011 there were fewer managed honey bee colonies in Central California, and numbers of feral honey bee numbers did not increase during this time. Honey bees are general foragers, meaning they can feed on a wide variety of flower species. Bumble bees are more specific in their taste of flowers. The study suggests that dietary overlap of feral honey bees with native bumble bees may be linked to the decline in native bee populations.

## **California Fails to Add Glyphosate to Prop 65 Warning, May Add Coffee to the List**

The state of California is notorious for strict, sometimes nonsensical, labeling laws. In 1986, California voters approved the Safe Drinking Water and Toxic Enforcement Act, better known as Proposition 65. The act required the state to develop a list of substances or exposures that may be linked to cancer or reproductive harm. The list has grown so long and many of the substances so ubiquitous in everyday life that it has caused many people to simply ignore the warnings. Many products with the Prop 65 warning contain such a chemical, but at infinitely tiny amounts that pose no health threat. The list includes: alcoholic drinks, aloe vera (yes, the medicinal plant), caffeine, oral contraceptives, and wood dust. A US District Court issued a preliminary injunction that prohibits California from its “false and misleading” Prop 65 labeling of glyphosate. Hundreds of studies and conclusions from the EPA, National Institute of Health, independent and regulatory agencies around the world have determined that glyphosate is safe for use and does not cause cancer. Meanwhile, a lawsuit has been brought forward claiming that acrylamide - a substance which occurs naturally in foods that have been heated to high temperatures, like coffee - is a chemical that possibly causes cancer and so coffee products should require a cancer warning. There are some studies that indicate that acrylamide may increase risk of cancer, but only at levels thousands of times high than found in common foods. To date, scientific evidence suggests that levels of acrylamide found in common food poses no health risk to humans.

## **Small Farm Tour and Workshop, Battleground to Breaking Ground - [March 9-10](#)**

Are you interested in starting a small farm, raising fruit, vegetables, and/or livestock? Are you a veteran of the armed services or are you a disabled individual? If you answered yes to any of the above questions, Texas AgrAbility is a nationwide network of agricultural service providers who connect, assist, and empower individuals who are engaged in agriculture. Texas AgrAbility is funded by the USDA National Institute of Food and Agriculture.

On March 9th, they will be hosting a farm tour at Millican Reserve, a local farm who participates in Community-supported agriculture (CSA), conservation, agri-tourism, and farmers markets. Participants will learn how they started, how they grow their produce, their experiences when starting a CSA, and how they added agri-tourism to their income stream. Appetizers and drinks will be provided. Millican Reserve is located at 4401 High Prairie Rd., College Station, TX 77845. Tour begins at 4:00pm and will conclude at 7:00pm. For more information, call 979-862-1913.

On March 10th, Texas AgrAbility and Battleground to Breaking Ground will be hosting an agricultural workshop for veterans, individuals with disabilities, beginning farmers and ranchers, and anyone interested in starting an agricultural business. Workshop sessions will include: Rural Business Ideas; Intro to Business Planning; Possibilities for farming/ranching with a disability; Financial funding sources for farming/ranching; Marketing Resources; Resources to support agriculture business operations. The workshop will be held at Texas A&M University Campus, within the new Agriculture and Life Sciences Building, 600 John Kimbrough Blvd., College Station, TX 77843. The workshop will run from 8:00 am - 5:00 pm.

There is no cost for either event, but you are asked to pre-register: 979-862-1913

**As always, please feel free to contact me about your individual issues, needs or concerns.**

I can be reached by phone at 979-732-2082

or email at [stephen.janak@ag.tamu.edu](mailto:stephen.janak@ag.tamu.edu).

Sincerely,



Stephen D. Janak

County Extension Agent—Ag/Natural Resources—Colorado County

**[colorado.agrilife.org](http://colorado.agrilife.org)**

*Educational programs of the Texas A&M AgriLife Extension Service are open to all people without regard to race, color, religion, sex, national origin, age, disability, genetic information, or veteran status. The Texas A&M University System, U.S. Department of Agriculture, and the County Commissioners Courts of Texas Cooperating. Individuals with disabilities who require an auxiliary aid, service or accommodation in order to participate in this meeting are encouraged to contact the County Extension Office at (979) 732-2082 ten (10) days prior to the meeting to determine how reasonable accommodations can be made.*

316 Spring St.  
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