

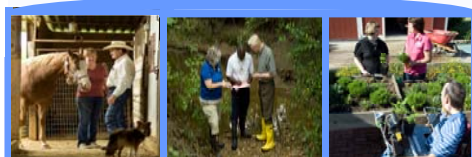
TEXAS A&M
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A&M UNIVERSITY
COLLEGE OF AGRICULTURE
AND HUMAN SCIENCES
Cooperative Extension Program

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Making a Difference In Tarrant County

2016 4-H NATIONAL YOUTH SCIENCE DAY



Cover page:

2016 4-H National Youth Science Day

Supporting Tarrant County's Agriculture

Protecting Your Animals Is Mostly Common Sense.....2

Improving Tarrant County's Health

In Need Of A Tune-Up?.....3

10 Ways To Cut 500 Calories A Day.....4

Enhancing Tarrant County's Horticulture

Texas Trees For Fall Color.....5

Victims of the Vectors.....6

Developing Tarrant County's Youth

It's The Most Wonderful Time Of The Year...To Take A Photo.....7

Back page:

Strengthening Tarrant County's Families

Happy Tax Season

Acknowledgements & Contact info

You can find us on Facebook at:
www.facebook.com/agrilife.tarrant



October 6 was a great day for young 4-H STEM students who participated in the 2016 4-H National Youth Science Day (4-H NYSD) Challenge, Drone Discovery. Located at Lockheed Martin Aeronautics in Fort Worth, 4-H'ers from across Tarrant County became engineering experts for the day as they had fun with drones.

This year's hands-on science challenge explored the science behind drones and how they are being used to solve real world problems. Youth learned everything from flight dynamics and aircraft types, to remote sensing and flight control, as well as safety and regulations.

Youth split up in groups with engineers from Lockheed Martin to experience the challenge, building their own foam drones and putting them to the test. Youth left with an appreciation and understanding of drones, and how they help solve real-world problems.

Many thanks to **State Representative Giovanni Capriglione, and Kathryn Rotter** from our Extension Leadership Advisory Board, for joining us for the event.

Special appreciation to **Lockheed Martin Aeronautics, Diana Gomez, and her amazing team of engineers and staff** who so generously shared their time and expertise to make this day an unforgettable experience for our 4-H'ers.



Protecting Your Animals Is Mostly Common Sense

Fred M. Hall
County Extension Agent
Agriculture & NR

Every time there is a zoological disease (one that is shared between animals and people) outbreak we see tons of articles and television stories on how the disease is ravaging the animal kingdom. But protecting our pets and farm animals boils down to some pretty ordinary systems that are easily put into place. Biosecurity really means doing everything you can to reduce the chances of an infectious disease being carried onto your farm by people, animals, equipment, or vehicles. It also means doing everything you can to reduce the chance of disease leaving your farm.

Diseases are defined as either foreign, emerging or endemic. A "foreign animal disease" is one that is not currently found in the U.S. Federal and state animal health regulatory agencies carefully monitor these diseases to ensure that if they occur, they will be promptly identified, controlled and eradicated. Emerging/endemic diseases are either new to the U.S. or new forms of old diseases that are becoming more prevalent. The emergence of an animal disease may be related to animal movement in commerce, mutation of disease-causing agents, or changes in environmental conditions.

While we recognize that biosecurity has four sequential phases: mitigation, preparedness, response and recovery; most animal owners need to really work on mitigation and preparedness. Mitigation means making something less dangerous or harmful. One can think of mitigation as a type of prevention. Mitigation practices help secure facilities/premises against infectious diseases. Preparedness includes planning, training for and implementing mitigation practices to ensure their usefulness. There are many ways to protect a premises, but they may not all be useful or cost-effective.

Here are my "top eight" bio security practices that any animal owner can use.

1. **Limit nonessential traffic on the farm.** Post a sign at the entrance instructing visitors to check in at a central location. Instruct drivers of essential vehicles, such as feed or milk trucks, to drive only where they need to go.
2. **Require all delivery haulers to clean and disinfect their vehicles** before hauling livestock or feed to or from your operation.
3. **Know who is on your farm or ranch at all times.** Keep a record of all deliveries and visitors. If a highly infectious animal disease occurs on your farm, this information will help with follow-up investigations. Unauthorized visitors should not be allowed to come in contact with farm animals. Make sure that visitors have not been in countries where diseases such as foot-and-mouth disease have recently occurred.
4. **Provide disinfectant and appropriate disposable footwear.** Essential and authorized visitors, such as veterinarians and dairy inspectors, should wear outer garments or coveralls and disinfect their boots before entering the animal areas and before exiting the farm.
5. **Use separate equipment for healthy and sick animals.** Feed, water and treat healthy animals before working with sick animals.
6. **Keep dogs, cats, and other animals confined to the farm.** Dogs, cats and horses can serve as mechanical carriers of disease.
7. **Control rodents and insects.** Keep insects, rodents and birds out of feed storage. They can carry diseases and may serve as a reservoir of infection.
8. **Call your veterinarian immediately if you observe unusual disease symptoms in livestock.** Your veterinarian and state or federal veterinarians can help diagnose and prevent a disease from spreading.

For more detailed information go to the publications tab at: <http://agrilife.org/urbantarrantag>.



In Need Of A Tune-Up?

Darlene Myatt
Extension Agent
Expanded Food & Nutrition Education Program



If your body were a computer, has it been receiving “error” messages lately? Is it beginning to run slower and take longer to “start?” Here’s a checklist to help optimize your performance and prevent crashing.

Are you running too many programs at once?

If you’re operating less efficiently because there are too many demands on your system, shut down some programs. Some examples include:

- If time is tight, rather than make a special company dinner from “scratch,” plan a potluck meal.
- No time to work out AND style your hair afterwards ... try a new do or just cover your hair with an interesting accessory which might start a new fashion statement!

You may actually accomplish more if you don’t try to accomplish several things at the same time.

Researchers from the Massachusetts Institute of Technology are finding that multi-tasking can be less efficient than doing one task at a time, especially if the tasks are more complex.

Consider scheduling tasks for separate times:

- Alternate cooking days with workout days. Cook ahead on cooking days to free up time on your workout days.
- Plan a casserole or stew that can cook while you do yoga or take a walk.

If you do multi-task, combine a task that doesn’t demand as much input from your system as the other task. For example, work out on a treadmill while watching TV.

Is your anti-virus software up-to-date and running?

If you’re susceptible to every bug that comes around, it’s time to check what you’re eating, getting enough sleep, being physically active and reducing stress. The cost and time for “repairs” may be greater than the amount needed for prevention.

Is your battery dangerously low?

Recharge by eating healthy, getting some physical activity, making meaningful connections with others, stimulating your mind and devoting time to your spiritual renewal through such means as time spent in nature, music, prayer or service.

Are you bogged down by unneeded files and programs?

Remove anything from your life that isn’t needed and slows your overall performance. For example:

- Do you still belong to a club or organization that no longer meets your needs or interests? The time you’re giving this activity is taking time from something else. Move on!
- Are you ironing (what’s an iron, some of you may say!) the whole shirt when only the collar will show under your sweater?

Do you need to hit “escape,” “undo” or “delete?”

Your computer offers several options if you change your mind about a decision. Offer yourself that same choice with your life.

If you always say “yes” to a request for help, regardless of how busy you are, the next time consider saying one of the following. It’s not necessary to elaborate and give an explanation.

- “I’m sorry, but I’m not available that night.”
- “I can’t help you right now, but I could (in a half hour, next week, next month ...).”
- “I can only help you for an hour, and then I have to leave.” Then leave after an hour!

Time to reboot

Now, that you’ve finished trouble-shooting your personal system, consider making some changes. Then, reboot your body and enjoy the benefits!

Reference: University of Nebraska Extension



10 ways to cut 500 calories a day

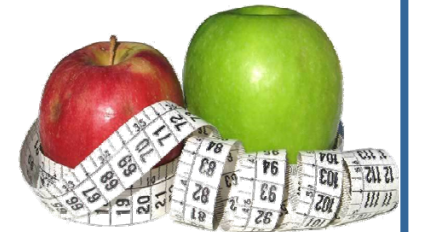
Markena Minikon
County Extension Agent
Nutrition & Health

No matter what type of diet you follow, to lose weight, you need to burn more calories than you take in each day. For most overweight people, cutting about 500 calories a day is a good place to start. If you can eat 500 fewer calories every day, you should lose about a pound (450 g) a week.

How to Cut Calories

Try these 10 ways to cut 500 calories every day. It is easier than you may think.

- **Swap your snack.** Many people reach for a snack or two in between meals. Snacking is fine, just be sure to choose lower-calorie options. The key is to have some [healthy snacks](#) ready when hunger hits. Instead of a 3-ounce (85 g) bag of flavored tortilla chips (425 calories), choose a cup (250 mg) of air-popped popcorn (31 calories), a cup (250 mg) of grapes and a low-fat cheese stick (180 calories) or a small apple and 12 almonds (160 calories). Choosing healthy snacks twice a day will save you 500 calories.
- **Cut one high-calorie treat.** Try to nix one high-calorie food item each day. Whether it is a donut in the morning, a brownie or bag of chips at lunch, or chocolate cake after dinner, you will save 250 to 350 calories or more. To burn another 150 calories take a 40-minute brisk walk after lunch or dinner.
- **DO NOT drink your calories.** One 12-ounce (355 mL) regular soda has about 150 calories, and a 16-ounce (475 mL) flavored latte can pack 250 or more. Even fruit smoothies have lots of calories, as many as 400 in a 16-ounce (475 mL) serving. A couple of sweet drinks a day can easily add up to 500 calories or more. Choose water, sparkling water, or black coffee or tea instead and save your calories for foods that will help you feel full.
- **Skip seconds.** Taking a second helping can add up to unwanted calories. It is easy to keep filling your plate when you serve food family style on the table. Instead, fill your plate once and keep extras in the kitchen. Or, if you still do not feel satisfied, add a second helping of vegetables, fruit, or salad.
- **Make skinny substitutions.** Substitute lower-calorie options for some of your high-calorie favorites. For example, if a recipe calls for a cup (250 mL) of sour cream (444 calories) or heavy cream (821 calories), use plain low-fat yogurt instead (154 calories).
- **Ask for a doggie bag.** The [portions](#) at most restaurants are much larger than recommended serving sizes. Instead of cleaning your whole plate, ask the server to put half in a container for you to take home for another meal. You can also share an entrée with a friend, or make a meal out of an appetizer and a large salad. Just be sure to go easy on the dressing and high calorie toppings.
- **Just say "no" to fried food.** Frying food adds lots of unhealthy calories and saturated fat to any dish. Instead of fried chicken or fish, choose grilled, broiled, or poached instead. And skip the French fries. A large serving of fries alone can add almost 500 calories to a meal. Instead, see if you can substitute for the vegetable of the day or a side salad.
- **Build a thinner pizza.** Skip the meat toppings, extra cheese, and deep-dish crust, and have a couple slices of thin-crust vegetable pizza instead. You will save a little over 500 calories.
- **Use a plate.** Eat all food from a plate or bowl, including snacks. When you snack out of a bag or box, it is easy to eat more than you intend to. This is especially true if you are sitting in front of the TV. You may be surprised to learn that a large bag of chips will run more than 1000 calories. Instead, place one portion in a bowl, and put the rest away.
- **Avoid alcohol.** Cutting back on alcohol is an easy way for many people to trim [calories](#). Alcohol does not have any nutritional value, so when you imbibe (drink) alcohol, you are getting empty calories, up to 500 for some mixed drinks made with syrupy sweeteners, fruit juices, and ice cream or heavy cream. If you do order a drink, choose a 12-ounce (355 mL) light beer (103 calories) or a 5-ounce (145 mL) glass of wine (120 calories).



References

Centers for Disease Control and Prevention. Eat More, Weigh Less? Updated May 15, 2015. www.cdc.gov/healthyweight/healthy_eating/energy_density.html. Accessed May 11, 2016.
Centers for Disease Control and Prevention. How to Avoid Portion Size Pitfalls to Help Manage Your Weight. Updated August 18, 2015. www.cdc.gov/healthyweight/healthy_eating/portion_size.html. Accessed May 11, 2016.
Centers for Disease Control and Prevention. Rethink Your Drink. Updated September 23, 2015. www.cdc.gov/healthyweight/healthy_eating/drinks.html. Accessed May 11, 2016.
United States Department of Agriculture. National Nutrient Database for Standard Reference. Release 28. Updated May 2016. ndb.nal.usda.gov/ndb/search/list. Accessed July 27, 2016



Texas Trees for Fall Color

Steve Chaney
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Over the last several years we have lost huge amounts of trees in North Central Texas due to drought, old age and now this year to much rain and overcast skies. We have had disease, insects and just plain old age hit our trees as well, yet now is the time to start planning what new trees to plant! We can plant for spring color or fall color, fruit or nut or just plain old shade! Trees are good and much needed no matter what we plant them for, let's just be sure we plant them for the right reason and in the right spot!

Since we are going into Fall, lets concentrate on Fall Color. That's a very common question we get at the office this time of year, "Why do tree leaves change color in the fall?" The best answer I can give is that leaves get their green color from the predominance of chlorophyll, a green pigment that absorbs sunlight for photosynthesis. As deciduous trees experience the shorter days and longer nights of fall, chlorophyll production slows and the existing chlorophyll disintegrates. In the absence of this green pigment, three other pigments left within the leaves show through, thus fall colors appear. The three leaf pigments that cause fall color are red to purple anthocyanins, yellow to orange carotenoids and yucky brown tannins. Due to these pigments, leaves of some Texas trees might turn amber, gold, red, orange or yellow. Unfortunately, most simply fade from green to brown as seen in many of our native oaks. The brown color is dead leaf tissue and dried-up sap containing tannins.

Texas is not normally renowned for its fall color; however a few trees will provide dependable fall color. The degree to which leaves turn pretty colors rather than brown depends not only on the tree species but also on weather conditions. When fall in Texas is mild and drawn out over a couple of months, colors appear most vivid. Repeated cycles of cooler temperatures followed by days of warmer temperatures through September and October seem to increase the occurrence of good fall color. Texas red oaks in the Hill Country can rival the scarlet show of sugar maples when fall is long. Regrettably, this occurs only every few years.

Here are a few of my personal favorites, hope you will take them into consideration? In the shorter category, Deciduous Holly drops all its leaves and then covered in red berries. Japanese Maples if you're daring or Forest Pansy Redbud in the shaded areas for that wonderful burgundy ranges. Shantung Maple for sun or shade with colors ranging from orange to red. Mexican Buckeye, flowers in the spring and bright yellow fall foliage. In the middle category it's hard to pass up Chinese Pistache with its brilliant reds to yellows. Little Gem Magnolia with its dark green evergreen leaves. In the large category you can't go wrong choosing Bald cypress with orange to red soft foliage. Gingko, Chinquapin Oak, Cedar Elm for nice yellow color. Shumard Oak with its brilliant red is always welcomed in the landscape as the favorite color! Whichever you pick, make sure it fits in that area and enjoy it for years!!



Victims of the Vectors

Laura M. Miller
County Extension Agent
Horticulture

In order for plant disease to develop, three things must be in place: a susceptible host, a causal agent, and the right environmental conditions. Many diseases have a third element, a vector. Put your pre-calculus notes back on the shelf, and think instead of organisms that spread disease by moving the causal pathogen from host to host. Truly efficient vectors are very good at getting around, often because they can fly, and visit lots of potential hosts in the course of their daily activities.

Vectored plant diseases can be compared to vectored people diseases. Diseases spread by mosquitoes such as Zika and West Nile Virus are good examples. Here are a few important ones:

Rose Rosette

- **Susceptible Hosts:** The genus *Rosa*. There probably are some rose species that are resistant, but we don't know which ones. Because roses are so popular, and people have been breeding and selecting them for so long, the genetic material of most roses is a big mish mash of species. Our Texas A&M AgriLife Research plant breeder Dr. David Byrne is looking for resistance, as this is the best long term solution. Here in Tarrant County, we are doing our part with a small trial of possibly resistance rose cultivars in cooperation with the City of Grapevine and the Tarrant County Master Gardeners.
- **Causal Agent:** The Emaravirus we call Rose Rosette Virus.
- **Vector:** The eriophyid mite, *Phyllocoptes fructiphilus*.
- **Environmental Conditions:** Close proximity to other roses really favors the spread of this disease, which can be transmitted through grafting, including root grafts. Because the mites can blow in the wind, a non host plant windbreak can provide an unfavorable environment or disease development. Warm weather results in new growth and mite feeding, so cooler temperatures will slow down the disease.

Oak Wilt

- **Susceptible Hosts:** The genus *Quercus*, in theory. However there are many species of oak that have never developed a case of diagnosed and documented Oak Wilt in the wild. Dr. David Appel, Texas A&M AgriLife Extension plant pathologist has never seen a case of Oak Wilt in Post Oak, *Quercus stellata*, and he has looked at LOTS of Post Oaks in his career. In fact, with the major exception of Live Oak, *Quercus virginiana*, the entire white oak group, identified by their lack of pointy leaves, is considered to be resistant.
- **Causal Agent:** The fungus, *Ceratocystis fagacearum*.
- **Vector:** Sap feeding beetles in the Nitidulidae family and oak bark beetles in the Pseudopityophthorus genus.
- **Environmental Conditions:** Close proximity of other oaks, because the disease can be transmitted through naturally occurring root grafts. The beetle vectors are more active in the spring, so avoiding pruning from February through June will provide a less favorable environment for infection.

Are people ever vectors of plant disease? Of course we are. In the case of Rose Rosette Disease, both landscape crews and casual passersby have undoubtedly unwittingly moved those teeny tiny mites from rose bush to rose bush on their clothing. Because the RRD pathogen can live in a host plant for as long as 18 months before symptoms show, people sometimes introduce the disease into a new area by installing what looks like a perfectly healthy plant. Movement of firewood and even chipped wood debris from an Oak Wilt center to another location can bring along the beetle vector.

Unlike insect vectors, humans are subject to laws and regulations. This is the reason that quarantine measures such as the current ban designed to limit the spread of the invasive insect pest, the Emerald Ash Borer, from Harrison County to the rest of Texas work.

The things you can do to avoid being a victim of a vector can be simple like wearing insect repellent to avoid being bitten by mosquitoes or complex like trying to manage a population of microscopic mites, but the steps you can take to avoid being a vector yourself are simple and just as important.

It's The Most Wonderful Time Of The Year.... To Take A Photo

Shannon Johnson-Lackey
4-H Extension Agent
Cooperative Extension Program



As the holidays approach, some may have thoughts of the perfect photograph for the family album or for the holiday card. Whatever the reason, skip the photo studio at the mall and utilize your trusted point-n-shoot or digital SLR camera to capture the family photo and countless holiday memories.

Several articles offer useful suggestions about the best ways to take pictures of people. Since time with family during the holidays is often treasured, the photo memories will most likely be revisited from time to time. The following suggestions will help you capture great shots of the people who mean the most to you.

In the article, *How to take photos of people like a professional*, Andrew Gibson offers 12 tips for achieving the best people shot. A few of the tips he suggested are below. The entire article can be found at <https://photography.tutsplus.com/articles/how-to-take-photos-of-people-like-a-professional--photo-860>.

1. Shoot In Black and White

Black and white photos are artistic and creative. Some of the best fashion and portrait photographers around today shoot in black and white - and you shouldn't ignore the technique.

Black and white photography is about shape, texture, lighting and composition. Shoot in black and white and you'll improve your photography skills and eye for a photo.

2. Learn All About Light

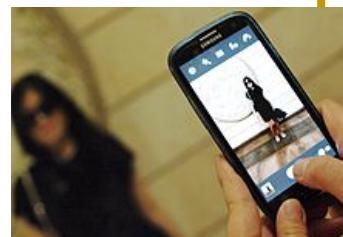
The best light for portraits may not be when you think. Overcast skies and late afternoon sun are good. Direct sun is bad - it casts harsh shadows on faces and makes people squint. Backlighting is very exciting, although you have to watch out for flare and you'll need a reflector or flash to put light onto your subject's face. Window light is very beautiful for taking photos indoors, though again you'll need a reflector to put light back onto the shadowed side of your subject's face.

What's a reflector? It's anything that reflects light back onto your subject so that the shadows cast by the light aren't so strong. You can buy purpose made reflectors from manufacturers like Lastolite, or you can make your own from a large piece of white card or a white sheet. Photographers need reflectors because the available light is rarely perfect. Reflectors enable you to take control of the light.

3. Avoid The Pose

You can learn about posing from studying photography and fashion magazines. But don't get too carried away with posing - you'll often get better results by encouraging your subject to play around for the camera. Get them to have some fun and be spontaneous. The resulting photos will be full of life.

In short, have fun taking photographs, experiment with different settings and lighting. Consider not lining everyone up in perfect rows, rather look for those spontaneous moments and snap away. Most of all, savor the memories of time spent with family and capture a few along the way.



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Happy Tax Season

Marian Ross, M. S.
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Family and Consumer Sciences

Ring in the new year is an optimal time to review your finances from 2016, however, as you prepare to tackle that task, also include time to prepare your information for filing taxes. If you have someone preparing your taxes for you, make your appointment now and begin gathering your paperwork.

Here is a list of a few suggested documents that will assist with taxes and making financial plans for 2017.

- \$ **Electronic Records**
- \$ **Copies of tax returns**
- \$ **Basic Records** - Documents to prove income and expenses. Own a home or investment? Basic records should contain documents related to these items.
- \$ **Income** - Amounts reported as income may include: wages, dividends, interest and partnership or royalties.
- \$ **Expenses** - Deductions may include: alimony, charitable donations/contributions, mortgage interest and real estate taxes. May also include child care expenses for which a credit can be claimed.
- \$ **Home Investments** - Basic records showing investment(s) and a gain or loss when selling it.
- \$ **Pay statements** - Expenses being withheld from their paychecks
- \$ **Health Insurance Documentation**

For complete information on tax preparedness visit <http://www.irs.gov>, Saturday, April 15, 2017 will be here before you know it.



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