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Making A Difference in Tarrant County



Small farm ponds are man made and not natural environments. They must be carefully managed to provide productive, recreational fishing. Think of a pond as a garden or an orchard. It must be properly laid out, fertilized, seeded (stocked), weeded, pruned (selectively harvested), and protected from acts of nature (e.g., oxygen depletions) to be bountiful.

Good pond management includes: enhancing food availability for fish, controlled harvesting to maintain the balance of predator and prey populations, controlling weeds, and preventing situations that may cause fish kills.

These are not simple tasks. Ponds are complex ecological systems and require personal commitment and insight for productive management. No two ponds are exactly alike. Ponds close to one another, but on the same watershed (surrounding area from which the pond receives rainfall or water drainage), will be slightly different. These differences are not well understood. However, we do know that soil characteristics and localized variations in the watershed are unique for each pond. Factors critical to managing a pond include: plankton, fish populations, and water quality.

A quality fish pond begins with proper pond construction, proper water quality and proper initial stocking. Pond size (surface acres) and goals are the most critical factors when determining the number and the type of fish to stock.

Pond dynamics are also affected by water quality. Factors such as pH (whether the water is acid or base), alkalinity, and dissolved oxygen affect fish health and pond productivity. Some aspects of water quality fluctuate daily, weekly, or monthly. Dissolved oxygen and pH cycle each day. Alkalinity can change over a period of time, ranging from several weeks to months, depending on the pH of the watershed or soils on the bottom of the pond.

Ponds smaller than 0.5 surface acres or ponds that are muddy due to suspended clay particles are commonly stocked only with channel catfish (CC) at a rate of 100 per surface acre if unfed. Largemouth bass (LMB) should be stocked at a rate of 40 to 50/surface acre to consume excess channel catfish reproduction. Some pond owners like to stock fathead minnows (1,000 per acre) as a forage fish in channel catfish ponds. These minnows are quickly eliminated if stocked with bass. CC numbers are then stocked on a put-and-take basis and, when properly managed, can answer the need for quality fishing for most landowners.

Most pond problems are related to improper management. One final problem which landowners should be aware of is fish kills related to pond "turnover." Pond turnover is related to pond stratification or layering. Stratification occurs when surface water warms faster than deep water. The warm layer is lighter and does not mix with the cool, deep water. The cool water near the bottom becomes stagnant and does not circulate. In the deep, cool water oxygen becomes depleted and toxic compounds may be produced by bacteria and decaying organic matter. A turnover occurs when the upper layer cools quickly and mixes with the stagnant layer. The resultant mixture may not contain enough oxygen to support fish. Turnovers usually take place after a cold, heavy rain or the sudden passage of a cold front. Immediate or preventive aeration may save the fish. Fish kills can also be caused by oxygen depletions resulting from phytoplankton bloom die offs or decomposing vegetation killed by herbicide applications.

Managing the Stock Pond for Fishing

Kenneth Johnson, Jr. County Extension Agent -Agriculture & NR

HIGH EFFICIENCY (HE) IN THE LAUNDRY ROOM

Marian Ross, M. S. County Extension Agent Family and Consumer Sciences



Being green just isn't for frogs any more. We are aware of recycling programs, which are wonderful for saving our environment. Have you thought about the savings your household could have when it comes to doing laundry?

Yes, high efficiency washers have been on the market for 10 years. Knowing how to use the cleaning system is what most consumers are more concerned with. HE - high efficiency means that when used according to directions, saves energy and water. The engineers and scientists have been working to develop HE washers and HE laundry detergents that work together. These new advancements have resulted in a cleaning system that has improved cleaning performance while continuing to save water and money.

The results of the research for HE detergents are they are formulated to be low-sudsing and quick dispersing to get the best cleaning performance. That is why HE detergents are the **only** choice for your HE washers. Detergents are also formulated to hold soils and dyes in suspension in low water volumes, so they don't re-deposit onto cleaned laundry. The detergents are formulated with the energy-saving technology to provide the best possible cleaning in only 20 to 66% the amount of water used in traditional washers.

Things to keep in mind:

- Use the designated dispenser compartment for each laundry product detergent, bleach, and fabric softener.
- Do not mix liquid and powder products in the same dispenser at the same time
- Do not overfill dispenser compartments
- "HE compatible" detergents are still regular sudsing detergents that should not be used in your HE washer.
- The tumble action of the high-efficiency washers creates more suds than the agitator action of traditional washers.
- A "maintenance cycle" is recommended to run to ensure that your HE washer remains clean and free from any soil buildups. If your HE washer doesn't have an automated maintenance cycle, read your instruction manual on how to perform this manually.

If you have questions, contact the laundry product or the washer manufacturer.

Making A Difference in Tarrant County



If you have heard the expression, "*The eyes have it,*" but aren't certain about the nutrients needed to help prevent cataracts, macular degeneration, glaucoma and other sight woes, here are some recommendations of top foods for eye health from the Academy of Nutrition and Dietetics to make certain your eyes <u>do</u> have it.

Kale: See the Light

This leafy green is a rich source of lutein and zeaxanthin which are related to vitamin A and beta carotene, and believed to protect eye tissues from sunlight damage while reducing the risk of cataracts and macular degeneration or loss of central vision.

Other good sources of these peeper-friendly nutrients include dark green leafy veggies like collard or turnip greens, spinach, broccoli, peas, kiwi, red grapes, yellow squash, oranges, corn, mangoes and honeydew melon.

Your body needs fat to absorb lutein and zeaxanthin, so be sure to eat them with a bit of hearthealthy fat such as a drizzle of olive oil.

Sweet Potatoes: The Color of Health

These orange tubers are another good source of beta carotene which may slow the progress of macular degeneration. Your body converts beta carotene to vitamin A, a nutrient that not only helps prevent dry eyes and night blindness, but fights off eye infections as well.

If by chance sweet potatoes are not your favorite beta carotene, try other deep orange-colored foods including carrots and butternut squash, plus dark green vegetables such as spinach and collard greens. Liver, milk and eggs are great sources of vitamin A too.

Remember, rather than popping a pill to supplement your diet, whole foods are the best choice since they may provide a combination of nutrients that have a synergistic healing effect. And, like lutein and zeaxanthin, beta carotene and vitamin A are absorbed best when eaten with a little plant-based fat.

Strawberries: Help You "C" Better

Fresh, juicy strawberries are also good for your eyes because they contain plenty of vitamin C – an antioxidant that can help lower your risk of cataracts. Other nutrient-dense options to load up your plate include bell peppers, broccoli, citrus (oranges and grapefruit) and cantaloupe.

Salmon: Goodbye, Dry Eyes

If dry eyes are a concern, Omega-3 fatty acids can help alleviate the problem. Get some healthy fats every day in the form of salmon (2-3 times per week), walnuts (which also provide eye-healthy vitamin E), avocado, olive oil, flax seed and olives.

Salmon is also a good source of vitamin D which helps protect against macular degeneration. In addition to sunshine, you may consider other options by downing sardines, mackerel, milk and orange juice fortified with vitamin D.

Green Tea: Antioxidant Powerhouse

A cup of green tea is more than relaxing and delicious – its antioxidants (identified as catechins) may help lower the risk of developing cataracts and macular degeneration. Other food sources to round out your menu would include berries, apples and chocolate.

Page 3

rant County Page 4 SAL ABOUT CATING ACHT FOR HEALTHY CHESICHT

Darlene Myatt Extension Agent -Expanded Food & Nutrition Education Program

Page 5



Markena Minikon County Extension Agent -Nutrition & Health

Spring is here and we're getting ready to clean up inside our homes and to work outside in our lawns and gardens. But all that lifting, climbing, trimming and other spring-cleaning activities heighten the risk for home injuries. According to the Home Safety Council (<u>www.homesafetycouncil.org</u>), there are over 10 million unintentional home injuries in the U.S. per year that result in visits to hospital emergency rooms. These injuries result in over 20,000 deaths per year. Falls and poisonings cause over half of home deaths.

Ladders - If you need to climb, use a ladder (not a chair, table or box):

- Place stepladders on level ground and open them completely, making sure all locks are engaged.
- ✓ Before using a ladder outdoors, choose a location that is at least 10 feet away from all power lines. Coming in contact with live wires can be fatal.
- ✓ Use the 4-to-1 rule for extension ladders: for each 4 feet of distance between the ground and the upper point of contact (such as the wall or roof), move the base of the ladder out 1 foot from the wall.
- ✓ Always face the ladder when climbing and wear slip-resistant shoes (e.g. those with rubber soles).
- Keep your body centered on the ladder and gauge your safety by your belly button. If your belly button passes beyond the side rail of the ladder, you are overreaching and at risk for falling.
- ✓ Make sure rungs are dry before using the ladder.
- ✓ Stand at or below the highest safe standing level on a ladder. For a stepladder, the safe standing level is the second rung from the top, and for an extension ladder, it's the fourth rung from the top

The Home Safety Council is an excellent source for information for additional home safety tips on:

- Making Your Home Safe from Fires
- Preventing Falls/Back Injuries
- Lawn & Garden Safety

Your safety at home is just as important as your safety at work!





Every woman that is of child-bearing age is encouraged to get enough folic acid each day even if you are not pregnant or planning to become pregnant. Birth defects of the brain and spine (anencephaly and spina bifida) happen in the first six weeks of pregnancy often before a woman finds out that she is pregnant. By the time a woman finds out that she is pregnant it may be too late to prevent these birth defects. Half of all pregnancies in the United States are not planned.

Folic acid helps in the development of new cells every day including blood, skin, hair, nails, and others. It is important for women to get 400 mcg of folic acid every day. Folic Acid is a B vitamin and is also known as folate and helps red blood cells mature and helps the body use some of the amino acids found in protein.

The best food sources of folic acid are fortified grain products such as bread, rice, pasta, and breakfast cereal. Folate, the natural form, can be found in orange juice, dark green vegetables, and beans.

Other great food sources of folic acid are folic acid fortified foods and whole grain foods, leafy greens (especially spinach), broccoli, asparagus, corn, oranges, liver, kidney, dry beans, and nuts, organ meats, poultry, fish, and eggs.

An easy way to be sure you're getting enough folic acid is to take a daily multivitamin with folic acid in it. Most multivitamins have all the folic acid you need. If you get an upset stomach from taking a multivitamin, try taking it with meals or just before bed. If you have trouble taking pills, you can try a multivitamin that is gummy or chewable. Also be sure to take it with a full glass of water.

If you are experiencing a deficiency of folic acid you may have anemia, fatigue, gastrointestinal disturbances, and having an inadequate intake before and during pregnancy is related to neural tube birth defects.

To find out more information about the importance of folic acid refer to the sources of this article: <u>www.nutrition.gov</u> and <u>www.agrifilie.org</u>.

The Importance of Folic Acid in Pregnant Women

Tiffany Traylor Family & Consumer Sciences Extension Agent Cooperative Extension Program

Mulch-Low Tech, High Impact

Steve Chaney County Extension Agent - Horticulture

Mulch is simply a layer of material covering the soil surface around your plants. There is nothing glamorous about mulch, but it is by far the lowest-technology, highest impact gardening practice of all.

Much of the research over the years has shown that unmulched shrubs may lose up to two-thirds of any water applied through evaporation from the soil and only one-third through plant use (transpiration). There is truly much to mulch, from potted plants to the biggest tree in the landscape they all need and benefit from mulch.

The primary benefit of mulching is water conservation, but it also does the following:

- Reduces soil erosion (especially on slopes) from wind and rain, protecting your soil.
- Moderates soil temperatures by keeping soils warmer in winter and cooler in summer.
- Reduces weed populations by keeping weed seed in the dark, smothering weeds, restricting weed growth, or making them easier to pull.
- Reduces soil borne plant diseases by preventing rain or irrigation water from splashing soil fungi up onto the stems, foliage, flowers and fruit.
- Provides organic matter to the soil by decomposing into the soil or with tilling into the soil annually.
- Creates aesthetically pleasing soil covering, whether full of plants or not!

Mulches can be organic materials, such as shredded bark, compost, recycled paper, pine straw and wood chips; or inorganic materials, such as chipped granite, lava rock, limestone, woven plastic, river rock, and recycled, chipped tires.

Organic mulches are preferred by most, as they return organic matter back to the soil. Rock mulches have their place though; take a hint from the natural environment. Stone and rock mulches are very natural in West Texas or in your more xeriscapic designs. Pine straw mulch looks great in East Texas and good old cypress mulch looks good pretty much anywhere. Organic mulches still have the advantage over rock mulches in most situations. Organic mulches decompose and add much needed organic matter to the soil. They also reflect less sunlight, reducing heat loads on plants and surrounding buildings. The disadvantages of organic mulches are they can wash away in "toad floating" rain events and they need to be replenished annually.

Here are some more guidelines to aid you in choosing and using mulches in your landscape:

- Cost of mulches varies primarily based on distance shipped to your nursery or garden center; try to use locally processed mulches – don't select pine straw in West Texas or composted cotton bur hulls in East Texas.
- Cost of mulches varies significantly between mulch in bulk versus bagged; bulk is usually cheaper (about 20% less) but not often recommended by the best landscape contractors. Bulk mulch must be moved twice: it must be shoveled into a wheelbarrow or cart, pushed pulled or dragged to the planting bed, dumped; shoveled around the bed; and spread. Way to much work!!!
- Use bagged mulch if at all possible. It is worth the added expense. Bags save you time and lessen the workload; bags are easy to transport to the planting bed, and mulch is easier to spread from the cut bag!

The main lesson to learn is some mulch is better than no mulch, it may not be hi tech but Mother Nature has been very successful with it for thousands of years!!

Making A Difference in Tarrant County



The incidence of Rose rosette disease (RRD) has increased substantially in Tarrant County in the past two years. It has certainly caught the attention of many gardeners who grow and enjoy roses as well as landscapers who care of them. There is quite a bit of information on the internet, and various factsheets, guidance documents, and voices from media. So what do we know and what don't we know about this disease?

The symptoms associated with RRD include witches broom, malformed flowers and leaves, excessive leaf growth, excessive thorniness, red discoloration, lateral shoot elongation, flattened stems, and enlarged stems. However, symptoms are variable on different rose plants. For example, red shoots do not occur in some ornamental rose varieties, and in other varieties, normal new growth is almost always red. To add to the confusion, herbicide damage can cause witches broom and deformations of flowers and leaves, as can insects.

While the symptoms of RRD can be confusing, the disease itself has a rather long history of baffling gardeners and scientists. It was originally described in the 1940s in both Canada and the United States, but wasn't reported in Texas until the 1990s when it was found in both the East Texas rose production area, and in Fort Worth/Dallas landscapes.

The cause of the disease was the cause of much debate. Tiny mites are often present on symptomatic plants, and so it was presumed that perhaps they were the causal agent. However, transmission experiments using eriophyid mites collected from asymptomatic roses did NOT result in appreciable rose rosette symptoms. Therefore it is unlikely that the eriophyid mite feeding can cause the observed damage symptoms all by itself. For quite some time, the number one suspect was a phytoplasma. Research articles from various parts of the world demonstrated the presence of a phytoplasma (from the aster yellows family) causing rose rosette-like symptoms. Those symptoms persisted in an experiment where symptomatic plants were treated with antibiotics which should have killed or suppressed the phytoplasma.

In 2011, a research group from the University of Arkansas reported the detection of a new virus, specifically an Emaravirus (negative strand RNA virus), in symptomatic roses. They were able to detect this virus in 84 out of 84 symptomatic plants that were tested. This study also resulted in a genetic (PCR) test to detect the virus, and it is generally accepted that the cause of RRD is a virus that is transmitted by mites.

What is so bad about a virus?

While we can kill fungi with fungicides, and there are antibiotics and antibacterial agents available to treat diseases caused by bacterial pathogens, there is NO effective method to treat a virus on an infected plant. When symptoms are only observed on part of the plant, the disease may be localized or it may be systemic but remaining asymptomatic on other parts of the plant. Pruning out the infected part may eliminate the pathogen if the infection is localized, but if systemic, the infection will persist and continue to affect the plant. Additionally, mites carrying the virus can continue feeding on all parts of the rose and carry the virus to uninfected rose tissues.

What are the current best management practices to deal with rose rosette disease?

- 1. **Removal** of confirmed and/or symptomatic plants early after observation.
- 2. **Treatment** of adjacent plants with miticide to reduce probability of transmission by eriophyid mites. Please note: this will not stop the virus, if it is already in the plant.
- Please note: this will not stop the virus, if it is already in the plant.3. Monitoring (weekly) for symptoms and rapid action when and if symptoms are observed.

There are still lots of questions about the advisability of replacing recently removed roses with new plants. It is a good idea to remove all diseased plant roots from the soil before replanting in same area. Even though it is unlikely that the virus would spread by root grafts, that possibility hasn't been completely ruled out.

For more information about Rose Rosette Disease see Rose Rosette Disease Demystified available at the Texas A&M AgriLife Bookstore, <u>http://www.agrilifebookstore.org/product-p/eplp-010.htm</u>.

To submit a sample for PCR testing, visit the Texas Plant Disease Diagnostic Clinic: <u>plantclinic.tamu.edu.</u>



ROSE ROSETTE DISEASE

Laura M. Miller County Extension Agent -Horticulture

Page 9

Making A Difference in Tarrant County



Character or the lack there of, is a word that gets thrown around a lot in today's society. What is character? In my workshops I explain to the youth Character is what you do when you think no one is looking.

One particular pillar of character that is often overlooked, unless you are involved in a youth organization, is Citizenship. According to the Josephson Institute, "Citizenship is doing your part to make your school or community better." Volunteering not because you have to but because you want to is one of the ways to practice Citizenship.

A common excuse for not volunteering is expecting someone else to. This statement is made for many reasons such as lack of time or not wanting to commit to something, but more often than not the reason is because we believe someone else will.

If everyone takes that stance nothing will ever get done.

Here are some ways adults can volunteer with Prairie View A&M University Cooperative Extension Program in Tarrant County:

- program direction)
- sessions)
- Serve as a 4-H Advisory Board/Committee Member
- Serve as a 4-H Contest or Scholarship Judge
- Extension programs)
- Other (just let us know how you can help us out)

Here are ways youth can volunteer:

- Serve as youth project leaders to teach younger 4-Hers
- Serve as an activity leader
- Serve as runners at contest or other events.

If interested in volunteering for any of the listed capacities do not hesitate to contact Mrs. Shannon Johnson-Lackey, EA-CEP 4-H or Mr. Cassius McAlister, EA-CEP 4-H at 817-884-1291.

www.charactercounts.org

Something to Pin Shannon Johnson-Lackey 4-H Extension Agent Cooperative Extension Program

One of my current favorite things is my Pinterest app. On Pinterest, I search for new recipes, decorating tips. Do It Yourself (DIY) projects and most importantly, fun hands-on activities for 4-Hers. As a result of my Pinterest obsession, I've discovered some pretty cool science-based activities for youth. I typically gravitate towards the science-based activities because 4-H has a goal of engaging one million youth in science. This goal was established as a result of 4-H seeking to address the demand for science and technology professionals. This demand is based on findings which suggest that "America faces a future of intense global competition with a startling shortage of scientists. Only 18 percent of U.S. high school seniors are proficient in science (NAEP 2005) and a mere 5 percent of current U.S. College graduates earn science, engineering, or technology degrees compared to 66 percent in Japan and 59 percent in China." (1)

The following science-based and kid-friendly experiment is not only a Pinterest find but a great Spring Break time-filler. This experiment is easy to do and budget friendly since it utilizes some common household items. (2)

Exploring Gas w/Balloons, Baking Soda & Vinegar



Baking Soda

Plastic Bottle

Funnels (we used 2)

What To Do:

1. Using your funnel pour vinegar into your bottle. You only need to fill about 1/3 of the bottle.

What You Need

Balloon

- 2. Using another (dry) funnel pour baking soda into your balloon. Fill the balloon approx. 1/2 way.
- 3. Cover the top of the bottle with your balloon. Make sure you don't let the baking soda spill into the bottle prematurely.
- 4. When ready, lift your balloon and let the baking soda fall into the vinegar.
- 5. Watch as the mixture fizzes, bubbles & expands your balloon!

Vinegar

- 6. Discuss how the baking soda & vinegar produce a gas which fills the balloon.
- 7. Repeat! Believe me; your kids will want to do this more than once.

The science behind it - Baking soda and the vinegar create an ACID-BASE reaction. When combined/mixed they create a gas - carbon dioxide. Gasses need room to spread, so the carbon dioxide fills the bottle and then moves into the balloon inflating it.

Resources:

- 1. http://www.4-h.org/youth-development-programs/4-h-science-programs/
- www.momto2poshdivas.com

Page 10

Serve on Urban Youth Task Force (commitment of 3-4 meetings a year and provides

Serve as a 4-Club Manager or Assistant Club Manager (yearly commitment to partner with Extension Agents to form and hold monthly 4-H Club meetings and support project work) Serve as a 4-H Project Leader (short term commitment to partner with Extension Agents to provide technical knowledge and oversight to 4-H project groups for 1-6 educational

■ Volunteer at our annual contest or event (we will contact you periodically throughout the year as we hold 4-H contests, Urban Youth Task Force events, or other Cooperative



Formal volunteering is an act in which a person volunteers to assist with an activity to benefit the community. While this may seem like a simple definition, the work of a volunteer is neither simple nor easy. It often includes a sacrifice of personal time and other resources, yet the volunteer receives no monetary payment for services.

So who would want to volunteer?

Typically, people who volunteer are those who possess a desire to "do good things" for other people. They want to make a difference in the lives of others. Often, they find a specific organization or group whose mission matches their personal beliefs and values.

What does a volunteer do?

Some volunteers desire to share specific skills while others volunteer to assist "wherever needed". Each non-profit program has needs specific to their organization and projects.

How does one place a price on the value of a volunteer?

One could consider the value of each of the following:

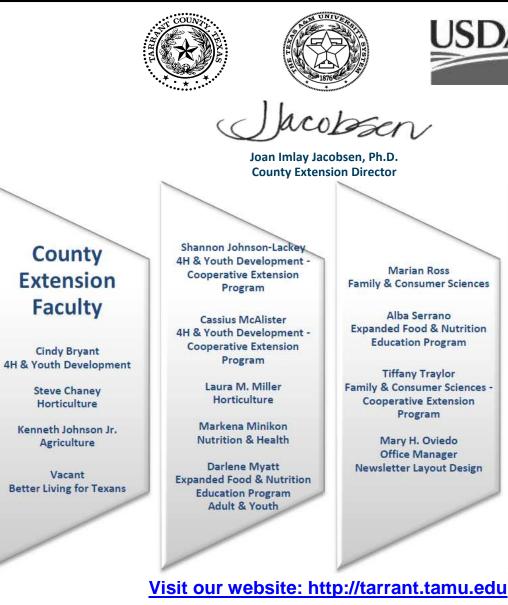
- Motivating a child to always put forth his best effort
- Encouraging a child when he feels disappointed
- Instilling the importance of integrity and character •
- Teaching perseverance toward a positive goal
- Rewarding a child's diligence
- Helping youth realize that they have special talents and gifts to share
- Serving as a positive role model
- Teaching life skills •
- Providing happy memories that will last a lifetime

Obviously, the only answer to the question of a volunteer's value is..... PRICELESS !

In Tarrant County, we are fortunate to have over 100 volunteers who eagerly donate their time and efforts to benefit the 4-H youth and others. To each one, we would like to extend a special

"Thank You for Your Priceless Gift ."

TEXAS A&M AGRILIFE EXTENSION SERVICE PO BOX 1540 FORT WORTH TX 76101 1540



NONPROFIT ORGANIZATION **POSTAGE & FEES PAID TEXAS AGRILIFE EXTENSION**



Family & Consumer Sciences

Expanded Food & Nutrition

Family & Consumer Sciences -

Community Educators

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Melissa Hernandez Adult Nutrition