Marion County Extension Newsletter

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TEXAS A&M AGRILIFE EXTENSION

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Topics Covered:

TEXAS WATER! IMPORTANT

Water is the most important natural resource for the future of Texas. In order to succeed in the face of continued drought and a growing population, Texans must better understand our statewide water needs, and then make smart choices about how we manage and conserve this unique resource for generations to come. We hope you will share your ideas and support for our efforts to educate, motivate, and collaborate with fellow Texans on key water issues.

Thomas G. Mason,
Chairman, Texas Water Foundation

From the Garden

Composting

Composting turns household wastes into valuable fertilizer and soil organic matter

By The U.S. Department of Agriculture (USDA)

In your backyard

All organic matter eventually decomposes. Composting speeds the process by providing an ideal environment for bacteria and other decomposing microorganisms. The final product, humus or compost, looks and feels like fertile garden soil. This dark, crumbly, earthysmelling stuff works wonders on all kinds of soil and provides vital nutrients to help plants grow and look better. Decomposing organisms consist of bacteria, fungi, and larger organisms such as worms, sow bugs, nematodes, and numerous others. Decomposing organisms need four key elements to thrive: nitrogen, carbon, moisture, and oxygen. For best results, mix materials high in nitrogen (such as clover, fresh grass clippings, and livestock manure) and those high in carbon (such as dried leaves and twigs). If there is not a good supply of nitrogen-rich material, a handful of general lawn fertilizer will help the nitrogen-carbon ratio. Moisture is provided by rain, but you may need to water or cover the pile to keep it damp. Be careful not to saturate the pile. Turning or mixing the pile provides oxygen. Frequent turning yields faster decomposition.

Getting started

Many materials can be added to a compost pile, including leaves, grass clippings, straw, woody brush, vegetable and fruit scraps, coffee grounds, livestock manure, sawdust, and shredded paper. Do not use diseased plants, meat scraps that may attract animals, or dog or cat manure which can carry disease. Composting can be as simple or as involved as you would like, and depends on how much yard waste you have, how fast you want results, and the effort you are willing to invest.

Cold or slow composting

With cold or slow composting, you can just pile grass clippings and dry leaves on the ground or in a bin. This method requires no maintenance, but it will take several months to a year or more for the pile to decompose. Cold composting works well if you don't have time to tend the compost pile at least every other day, have little yard waste, or are not in a hurry to use the compost. Keep weeds and diseased plants out of the mix since the temperatures reached with cold composting may not be high enough to kill the weed seeds or disease-causing organisms. Add yard waste as it accumulates. Shredding or chopping speeds up the process. To easily shred material, run your lawn mower over small piles of weeds and trimmings. Cold composting has been shown to be better at suppressing soil-borne diseases than hot composting. Cold composting also leaves more undecomposed bits of material, which can be screened out if desired.

Hot composting

Hot composting requires more work, but with a few minutes a day and the right ingredients you can have finished compost in a few weeks depending on weather conditions. The composting season coincides with the growing season. When conditions are favorable for plant growth, those same conditions work well for biological activity in the compost pile. However, since compost generates heat, the process may continue later into the fall or winter. Hot piles do best when high-carbon material and high-nitrogen material are mixed in a 1 to 1 ratio. A pile with the minimum dimensions of 3' x 3' x 3' is needed for efficient heating. For best heating, make a heap that is 4 or 5 feet in

each dimension. As decomposition occurs, the pile will shrink. If you don't have this amount at one time, simply stockpile your materials until a sufficient quantity is available for proper mixing. Hot piles reach 110 to 160 degrees Fahrenheit, killing most weed seeds and plant diseases. Studies have shown that compost produced at these temperatures has less ability to suppress diseases in the soil since these temperatures may kill some of the beneficial bacteria necessary to suppress disease.

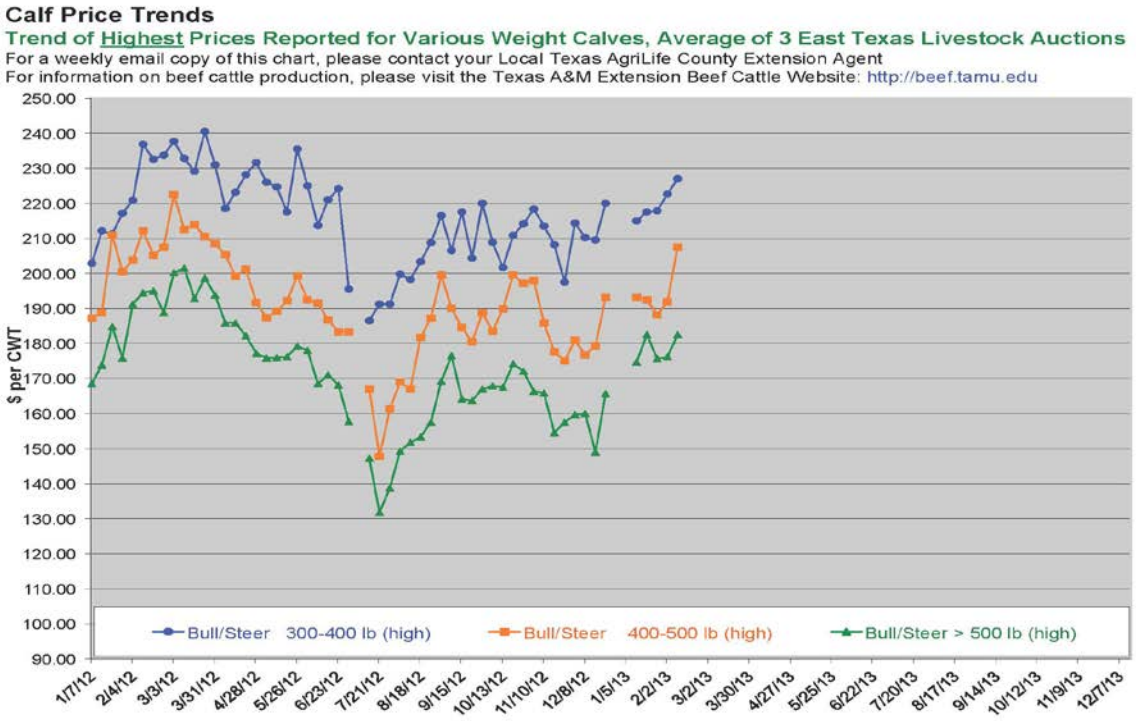
Using compost

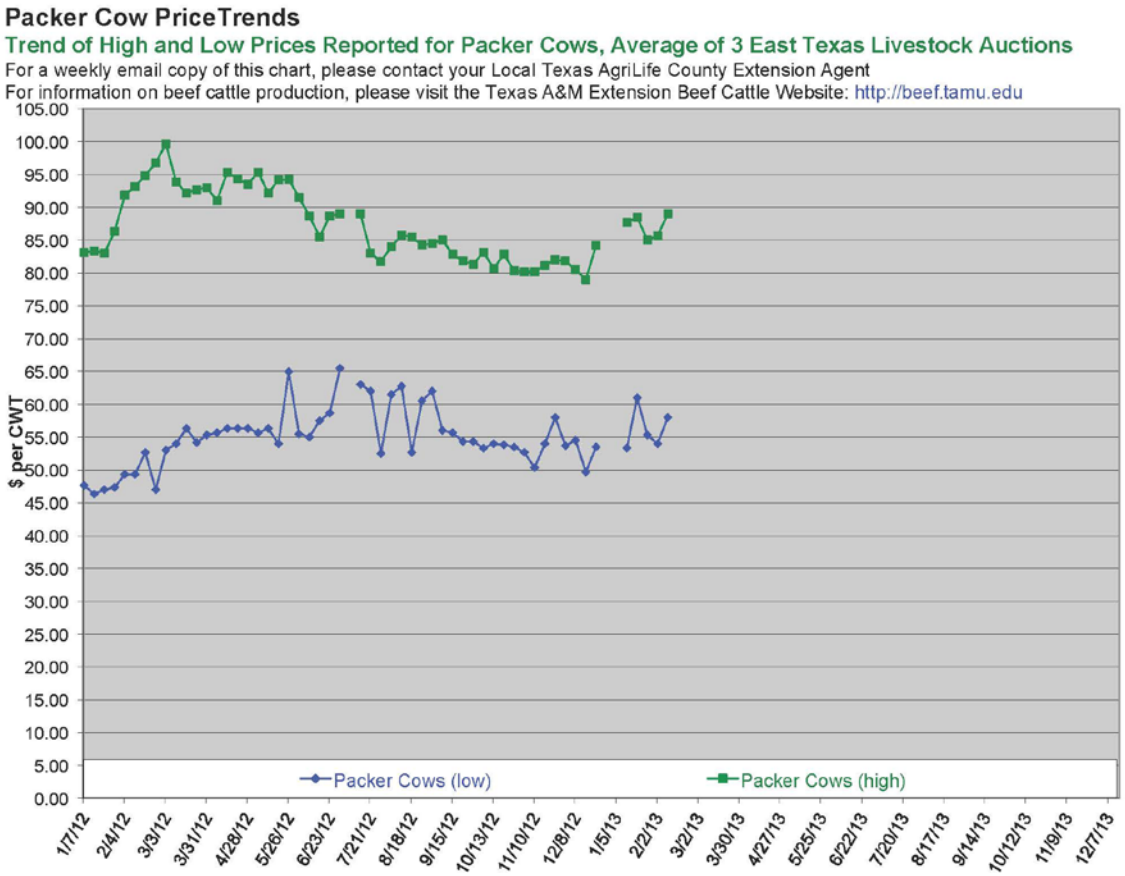
Compost can be used for all your planting needs. Compost is an excellent source of organic matter to add to your garden or potted plants. It helps improve soil structure which contributes to good aeration and moisture-holding capacity. Compost is a source of plant nutrients. Compost can also be used as a mulch material. Studies have shown that compost used as a mulch, or mixed with the top one-inch layer of soil, can help prevent some plant diseases, including some of those that cause damping of seedlings.

On the farm

On the farm, potential waste is turned into a resource that saves money and helps the environment. Producers use livestock manure to fertilize crops.When manure is properly handled, it can be safely applied to the land without the risk of polluting water. Composting is also practiced in some poultry operations. The compost is used as fertilizer on the farms and for lawns and gardens.

Beef Today





Dr. Stephen Hammack, Professor & Extension Beef Cattle Specialist Emeritus

NEW NATIONAL TRACEABILITY RULES

Starting March 11, 2013, all livestock moved interstate must have an approved method of identification and documentation. Brands, tattoos, and brand registration will be accepted as identification, if accepted by the shipping and receiving State or Tribe, along with numerous other methods. At this point, cattle under 18 months of age are exempt, unless movement is for show, exhibition, rodeo, or recreational events; rules concerning younger cattle will be addressed later. Also exempt are cattle going directly to a custom slaughter facility. (http://www.aphis.usda.gov/traceability)

TEXAS A&M AGRILIFE EXTENSION

East Texas Pasture Management Program

February 22, 2013

Texas A&M AgriLife Research and Extension Center
1710 N. Hwy 3053, Overton, TX

5 Pesticide CEUs Available

(1 laws, 1 IPM, and 3 general; TDA Course#0664195)

Preregister by Feb 21, 2013; Cost: $25/ person
Register at: https://agriliferegister.tamu.edu; Keyword: pasture
Registration includes a 2013 Herbicide Price Comparison CD
On-Site Registration Cost: $30/person

12:30 Check in and Registration

1:00 Effective Weed Control with Weed Identification, Proper Timing and Herbicide Selection (Dr. Vanessa Corriher-Olson, Assistant Professor and Extension Forage Specialist)

2:30 How to Determine and Adjust Stocking Rates (Dr. Jason Banta, Assistant Professor and Extension Beef Cattle Specialist)

3:00 Break (coffee, bottled water, and snack provided)

3:15 How to Use the Herbicide Cost Comparison CD (Dr. Jason Banta)

3:45 External Parasite Control (Dr. Jason Banta)

4:45 Fertilizer Best Management Practices and Products that are Too Good To Be True (Dr. Vanessa Corriher-Olson)

6:00 Adjourn

A herbicide price comparison CD, updated for 2013, will be provided to help you make more economical choices when it comes to selecting a herbicide.

For more information on this program please contact Michelle Sensing @ 903-834-6191.

Educational programs of the Texas A&M AgriLife Extension Service are open to all people without regard to race, color, sex, disability, religion, age, or national origin.

Worth It

Weighing the costs of implementing the state water plan and the consequences of doing nothing Story by Leslie Lee

In Texas, ensuring water security for a burgeoning population dependent on diminishing water supplies is nothing if not complicated.

The closest thing to a clear solution to Texas' water woes is the state water plan, experts say. Every five years, the Texas Water Development Board (TWDB) publishes the plan, which is composed of science-based contributions from the state's 16 regional water planning groups.

Created after the 1950s drought, TWDB is equipped by the state to provide loans to local governments for needed water supply projects identified during their regional water planning process. The state water plan takes into account all water users and lays out strategies over a 50-year planning horizon.

However, legislators haven't funded the plan in previous years due to other looming budget priorities and the plan's total capital cost. Some insiders have predicted that it will receive some sort of dedicated funding source during the 83rd Legislative Session, while others have wondered if the current political climate can tolerate the large financial undertaking. On January 10, state **Rep. Allan Ritter** filed two bills: HB 4, proposing "the creation and funding of the state water implementation fund for Texas to assist the Texas Water Development Board in the funding of certain water-related projects," and HB 11, providing "for an appropriation of money from the Economic Stabilization Fund to finance certain water-related projects." *

Facing Texas' water realities

These three numbers give a snapshot of the economic side of Texas' water situation: 1.1 million, 26.9 billion and 140.

1.1 million people—that's just slightly less than the city of Dallas' current population.

It's also the number of Texans who would lose their jobs by 2060 if drought of record conditions recurred and water management strategies identified in the state water plan were not implemented, according to TWDB data projections.

$26.9 billion—that's the estimated total state financial assistance requested by regional water planners, out of the $53.1 billion total capital cost needed to implement the water plan.

However, this assistance would not be direct appropriation funds, officials said, but instead would be low-interest loans to the local and regional entities that will actually implement and

construct the plan's water supply projects. According to TWDB, of the $26.9 billion, all of the principal and the majority of the interest would be paid back to the state.

140 days—that's how long Texas' 83rd Legislature will convene. During those five months, legislators such as Ritter are aiming to make progress towards ensuring the state's water supplies.

The state has the facts, and it has a plan to prevent the 2060 projected water supply shortfall of 8.3 million acre-feet. The question is—what's going to be done with that plan?

An unimplemented plan

The state water plan is the envy of other states, experts say—it's comprehensive, far-reaching, bottom-up. It involves the people, the planners, the number-crunchers. It looks back and also plans ahead.

"It's great that we have regional water planning groups, with this bottom-up planning process because people can look at what their needs are at the local and regional level," said **Tom Mason**, a former general manager of the Lower Colorado River Authority. Mason currently practices water and environmental law in Austin.

But, experts such as Mason ask, what's the use of a great plan if it is not implemented?

"It's an excellent document, and compared to other states I think Texas does a great job of preparing a water plan, but a plan implies a prelude to action, and implementation is really important," Mason said.

"Planning is important, but implementing the plan is critical," said **Carolyn Brittin**, TWDB deputy executive administrator.

Brittin said the longer Texas procrastinates on beginning the projects, the more vulnerable the state will be during drought and the more costly it will be to implement the needed projects in the future.

Breaking down the price tag

Total capital cost of $53.1 billion is enough to stop taxpayers in their tracks, but officials said not only is the price tag spread out over the 50-year planning period, only $26.9 billion of the total would come from the state, in the form of low-interest loans.

"No matter what state funding mechanism is chosen or used to fund the plan, local and regional water providers and their customers will repay 100 percent of the capital costs to construct the projects, as well as the majority of the interest," Brittin said. "$27 billion in projects does not mean $27 billion in appropriations."

Heather Harward serves as executive director of the H2O4TEXAS Coalition, a nonprofit organization working to mobilize public support for implementation of the plan.

Harward said $26.9 billion is "still a substantial number, but what that boils down to is something along the lines of approximately $150 million a year, according to most of the models coming out of the water development board and the Legislature.

"That money is loaned—it's not given away, and these are not grants," Harward said. "This is the state partnering with local entities to provide the most fiscally conservative financing options for implementing the plan."

She said the low-interest loans would involve benefits that are very important when implementing major infrastructure projects.

"The ability to use low-interest deferred loans, through state participation, gives projects more time before they start paying back, which is very critical when you're talking about some of these projects that take years of engineering and design," Ritter said.

According to TWDB, every $1 billion in financial assistance provided for water plan projects, over the course of project implementation, will generate $1.75 billion in sales revenues in the construction, engineering and materials sectors and supporting businesses; create $888.8 million in state gross domestic product; add $43.9 million in state and local tax receipts; and create or support nearly 13,077 jobs in the state. Supporters say the benefits of the plan will outweigh the costs.

"And, again, the annual revenue number is so important—$150 million," Harward said. "Of course that's still a significant amount, but relative to the state's overall annual budget it's microscopically small. And what gets so lost in this conversation is that not only are these loans, and the money ultimately flows back to the state, but also that with a lack of implementation, costs will only continue to increase."

Evaluating the plan

The loans would fund a diverse list of projects and strategies that each region has identified as needed to meet future water demands. The strategies vary widely in terms of cost.

"Aquifer storage and recovery and desalination are more so long-term strategies because of cost," Brittin said. Municipal conservation is the most cost-effective way to ensure the state's water supply, she said.

"The state water plan calls for almost a fourth of the 'new water' to come from conservation, and that's terrific," Mason said. "I'd love to see us focus on that first and foremost because it's the cheapest, the fastest, the most efficient way to make 'more' water available."

According to the plan, municipal conservation strategies are expected to result in about 650,000 acre-feet of supply by 2060, with irrigation conservation and other conservation strategies totaling another 1.5 million acre-feet per year. Regional water plans contain detailed proposals on the specific water conservation projects needed, Brittin said.

Prioritization of projects is an area in which the plan could improve, Mason said.

"It's over 500 individual water supply projects and strategies, but it is not prioritized," Mason said. "That's really important. If there's going to be any sort of state funding involved, I think we need to have some serious conversations at the state level, at the Legislature and water agencies, about how to grapple with which projects are best for the state as a whole and how do we prioritize them."

Brittin said funding realities serve to help regions prioritize strategies.

"I think you see that when regions recommend projects to be implemented in the plan, there's an inherent prioritization there, in that those that are more costly are recommended for later decades of the planning cycle, as opposed to those that are more cost effective and easier to implement today, those are recommended in the earlier decades," she said.

"Due to the cost of seawater desalination and some of the permitting issues that exist around it, we're seeing that recommended in later decades in the plan, like 2050 or 2060."

The "do-nothing plan"

Even with the plan's potential shortcomings, the consensus among water-minded legislative leadership seems to be that kick-starting implementation of the water plan is preferable to doing nothing.

"Last year's devastating drought made it clear that something needed to be done," said House Speaker **Joe Straus** at an October 2012 Texas Tribune event on water. "The 'do-nothing plan' is not one we should consider."

Currently, with the plan not implemented, a repeat of drought of record conditions would present Texas with an immediate water shortage of 3.6 million acre-feet annually, according to TWDB. If the state follows the "do-nothing plan," TWDB estimates that by 2060 Texas businesses' and workers' lost income would total roughly $116 billion. Foregone state and local business taxes associated with lost commerce would total $9.8 billion.

"Climatologists' predictions seem to suggest that the drought is not going to subside anytime in the immediate future," Harward said. "So I think we'll continue to feel the pain throughout the state, which will result in economic losses, if we don't take bold action now."

Plan gains momentum

"I've had senators and representatives from all over the state talking to me about water—and that's been a first for me," Ritter said. "The reason for that is for the first time in my lifetime, every part of the state of Texas felt the (2011) drought to the extreme. Even where I live, where we get 45 to 60 inches of rain, we felt it—to the extent that if we would have had another year of no rain, we wouldn't have had the water to provide our area. That's scary.

"So, the dynamics are different than they were before 2011."

Whether other pressing budget issues will overshadow legislators' recollections of the historic 2011 drought is yet to be seen. If current drought conditions worsen, will pressure on lawmakers to take action on water increase? Or if conditions ease, will the previous drought fade from their memories like it was just a bad dream?

"I have watched this issue from different vantage points since the passage of Senate Bill 1 in 1997," Harward said. "And I see more momentum than I ever have before. The drought was an unfortunate catalyst, and I believe the drought culminated with our outreach efforts as well as those by the leaders in the Legislature on this issue."

Ritter chairs the House Natural Resources Committee, which is tasked with keeping an eye on drought and water supply issues.

"You can't have a functional society without water resources—it can't happen," Ritter said.

"And, what we know, just from the years of developing a state water plan, is that the cost of developing new water resources is skyrocketing.

"The smart thing for us to do would be to start on this critical path of developing water resources and not have what years ago was about $20 billion in costs, and is now $53 billion, end up being $100 billion."

Funding options

Ritter said he anticipates that members will propose various scenarios for funding mechanisms and hopes to see creative solutions for meeting these funding needs.

One funding mechanism that is more viable than it was last session, Harward said, is an investment from the Economic Stabilization Fund—commonly referred to as the Rainy Day Fund. According to the Texas Comptroller's Office, the fund currently holds more than $8 billion, generated largely by oil and gas production taxes. Following the state's 1986 economic slump, as noted in comptroller documents, voters approved a constitutional amendment creating the fund in the November 1988 general election.

"That's a revenue source that I've long advocated for and thought was a great fit, because the Economic Stabilization Fund by name just fits hand-in-glove with the water plan because we can

prove immediate job growth and both short- and long-term economic development (would result from implementation). So to me it seems like the perfect marriage, considering the issue and the intention of those dollars," Harward said.

Some experts say lawmakers may be warming up to the idea of using a portion of the fund for water purposes, and Ritter's HB 11 proposes such a plan.

Support from other interest groups regarding increased state spending on water is also developing. At the Texas Farm Bureau's annual meeting in December 2012, members voted in favor of the state developing a source of revenue, either through a dedicated fund or from the Rainy Day Fund, to make implementation of the state water plan possible.

"We understand the state water plan will be expensive, and we need a dedicated revenue source to fund it," said Bureau President **Kenneth Dierschke** in a press release. "Recognizing that agriculture is one of the major water users in the state, we want to be part of the solution."

The Texas Association of Businesses has also chimed in, voicing support in fall 2012 for increased fees on water use and vehicle registrations to fund state investment in water and transportation infrastructure.

Staying ahead of the curve

"We are close to being so far behind the curve (on water) that catching up will be difficult," Ritter said. "I'm very concerned about that. You could say the same thing for highways, but I think we're a little further behind the curve on water than we are on transportation. And I'm sorry that it costs money, but it does cost money."

"Yes, the plan is asking for money, but we're trying to get across that this is a good investment, and it is one that is going to improve job growth and economic prosperity," Harward said.

And so, all eyes turn to the Legislature and the long list of issues facing Texas lawmakers in 2013. Will water make the cut? Or will the plan continue to be just a plan?

"It's a priority—it's a priority of leadership and of members of the Legislature, but also of 'we the people,'" Ritter said. "The Legislature cannot solve this problem all by itself. Each one of us, working with our local entities, is responsible, too.

"But it is solvable. We know that. With the state water plan, with the road map, we know that we can develop water resources as new innovations come along, as we learn better management technologies and continue doing a better job."

Health and Wellness

Exercise: 7 benefits of regular physical activity

You know exercise is good for you, but do you know how good? From boosting your mood to improving your sex life, find out how exercise can improve your life.

By Mayo Clinic Staff

Want to feel better, have more energy and perhaps even live longer? Look no further than exercise. The health benefits of regular exercise and physical activity are hard to ignore. And the benefits of exercise are yours for the taking, regardless of your age, sex or physical ability. Need more convincing to exercise? Check out these seven ways exercise can improve your life.

No. 1: Exercise controls weight

Exercise can help prevent excess weight gain or help maintain weight loss. When you engage in physical activity, you burn calories. The more intense the activity, the more calories you burn. You don't need to set aside large chunks of time for exercise to reap weight-loss benefits. If you can't do an actual workout, get more active throughout the day in simple ways — by taking the stairs instead of the elevator or revving up your household chores.

No. 2: Exercise combats health conditions and diseases

Worried about heart disease? Hoping to prevent high blood pressure? No matter what your current weight, being active boosts high-density lipoprotein (HDL), or "good," cholesterol and decreases unhealthy triglycerides. This one-two punch keeps your blood flowing smoothly, which decreases your risk of cardiovascular diseases. In fact, regular physical activity can help you prevent or manage a wide range of health problems and concerns, including stroke, metabolic syndrome, type 2 diabetes, depression, certain types of cancer, arthritis and falls.

No. 3: Exercise improves mood

Need an emotional lift? Or need to blow off some steam after a stressful day? A workout at the gym or a brisk 30-minute walk can help. Physical activity stimulates various brain chemicals that may leave you feeling happier and more relaxed. You may also feel better about your appearance and yourself when you exercise regularly, which can boost your confidence and improve your self-esteem.

No. 4: Exercise boosts energy

Winded by grocery shopping or household chores? Regular physical activity can improve your muscle strength and boost your endurance. Exercise and physical activity deliver oxygen and nutrients to your tissues and help your cardiovascular system work more efficiently. And when your heart and lungs work more efficiently, you have more energy to go about your daily chores.

No. 5: Exercise promotes better sleep

Struggling to fall asleep? Or to stay asleep? Regular physical activity can help you fall asleep faster and deepen your sleep. Just don't exercise too close to bedtime, or you may be too energized to fall asleep.

No. 6: Exercise puts the spark back into your sex life

Do you feel too tired or too out of shape to enjoy physical intimacy? Regular physical activity can leave you feeling energized and looking better, which may have a positive effect on your sex life. But there's more to it than that. Regular physical activity can lead to enhanced arousal for women. And men who exercise regularly are less likely to have problems with erectile dysfunction than are men who don't exercise.

No. 7: Exercise can be fun

Exercise and physical activity can be a fun way to spend some time. It gives you a chance to unwind, enjoy the outdoors or simply engage in activities that make you happy. Physical activity can also help you connect with family or friends in a fun social setting. So, take a dance class, hit the hiking trails or join a soccer team. Find a physical activity you enjoy, and just do it. If you get bored, try something new.

The bottom line on exercise

Exercise and physical activity are a great way to feel better, gain health benefits and have fun. As a general goal, aim for at least 30 minutes of physical activity every day. If you want to lose weight or meet specific fitness goals, you may need to exercise more. Remember to check with your doctor before starting a new exercise program, especially if you have any health concerns.

Community Development

Leadership Marion County

In September of 2012, a group of twelve brave souls took the task on of being educated in Community Development through the Texas Raul Leadership Program. This has been an intense education of more then 50 hrs of classroom lectures. The group will graduate in April 2013. Here is a list of lecturers from the different classes which were held once a month:

Dr. Greg Clary- Economist, Texas AgriLife Extension Service, Chairman, Texas Center for Rural Entrepreneurship (TCRE)

Bob Asaf – Dale Carnegie Instructor for all of East Texas

Dr. Emily Prevost- East Texas Baptist University, PHD in Leadership

Randy Pringle – East Texas Baptist University, Ropes Course instructor

Lee Haggard – Security State Bank, East Texas Business

Dr. Rebekka Dudensing - Texas A&M AgriLife Extension Service
Community Economic Development

Dara Sanders – Shreveport Community Development Director

Brent Primrose – Regional Farm Bureau Director

Gary Traylor – Gary Traylor and Associates

If you are interested in becoming educated through the Texas Rural Leadership Program please contact the Marion County Extension office at 903-665-2421.

Upcoming events

February 21, Last Chance Videos, 8 CEU credits, 8 – 5, Kelly Park

March 4, Marion County Biggest Loser, 6 p.m. Kelly Park

March 14, Private Applicators Testing, 8:30 a.m. Gregg Co.

For more information contact the Marion County Extension office.

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"Improving Lives. Improving Texas."