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Celebrating and sharing our experiences along "the roads" we take through nature.

Award Winning Newsletter of the El Camino Real Chapter Texas Master Naturalist Summer 2011 Milam County

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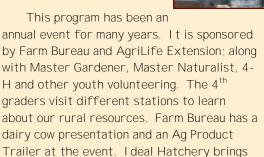
Did You Know?

How do birds eat seeds without any teeth?

See the last page for the answer.

AG in the Classroom, by Katherine Bedrich

mately 350 Milam County 4th graders gathered at the Youth Expo Building in Cameron to experience Ag In The Classroom.



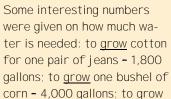
baby poultry for the youth to see. Food nutrition, cotton, and farm animals are some of the



other topics displayed.

El Camino Real Chapter gave a demonstration on water runoff into our watershed. (Do you know what watershed we are in?) The Watershed Environmental Station was used as an educational tool. It is set up with hot wheels, buildings, animals, tractors, etc. to demonstrate areas of runoff. Kool-aid, cocoa and squirt bottles are used to show how water picks up chemicals, oil, soil, and other debris and deposits them into the wa-





one bushel of wheat - 11,000 gallons; to produce a quarter pound hamburger - 1,000 gal-

We also suggested ways to use less water around the house, like turning off the water when brushing your teeth and using more native plants when landscaping.

Seven local schools participated; Buckholts, Cameron, Gause, Milano, Rockdale, Thorndale and St. Paul Lutheran. The sessions were quick, about 15 minutes per presentation; lasting from 9:00-noon. Chapter members Sandra Dworaczyk, Paula Engelhardt and Katherine Bedrich gave the presentations.

(By the way--- we are in the Brazos River Watershed) - Katherine Bedrich





Come Alive!

By Linda McBride

Who can close their eyes on a beautiful spring day, and not visualize, standing next to Julie Andrews, the two of you racing across the beautiful green fields and mountainsides of Austria, Julie in her flowing dress, with wide apron pockets, and cropped hair blowing in the wind, and you in knee high stockings and suspendered short pants, spinning around, and around with arms spread wide and heads tilting to the wistful blue ski as you burst into a chorus of, "The Hills are Alive with the Sound of Music."



Like Ms. Andrews, Donna's heart comes alive each day with the same enthusiasm for nature when she lifts the latch to her garden gate and swings the door wide, revealing her native "wildscape." Once inside, her world transforms like magic. A fresh cool breeze of spring tickles her nose. Summers face warms the earth beneath her feet. Rustling Oak leaves in fall bring a chill.

It is a place where plant leaves, branches, and blossoms sway to the gentle rhythm of the breeze. You can feel the excitement as you step through the same gates to find fresh mown paths, and beds stuffed with Black-Foot Daisies, Coreopsis, Milkweed, purple Passion-vines, and pink and white Buddleia just to name a few. Each plant curtsies and bobs its head in greetings as you enter.

Donna, like an excited child, will lead you through the paths to endless beds of flora. Chattering all the way, she will tell you all about the care and feeding of each and every one.

Flirtatious in its southern charm a rectangular bed of Russian Sage, Cowpen Daisies, Orangepeel Cestrum, Buddleia, and hummingbird plants will be the first to catch your eye. Like Donna, I wish I knew all



their names. If I did, I would be breathless just trying to name them all. Some of them are spindly plants stretching above my head and twirling like ballerinas. Passion-vines wearing their purple brooches, bat their long curly lashes. These lovely ladies of nature thrive on new growth and song.

Walking through this special garden of dreams that Donna built this year, you see twelve other beds of equal charm and grace spread around you. You can't help but feel the true love for "Mother Nature" in every step. Envision the labor of love in planning, in hand-digging, in hand-tilling, in hand-selecting and in nurturing all of these plants. You will see a true gardener and "Master Naturalist."

In early morning and late afternoon the birds gather at strategically

placed feeding stations outside the garden, and feast on mixed bird and sunflower seeds before retiring to the garden parlor where birdbaths serve fresh water for sipping and bathing. Figuring out the hierarchy of who drinks or bathes first is beyond my guess. Enjoying the rippling and splashing waters are enough for me as Cardinals, Blue Birds, Doves, Painted Buntings, and even Sparrows shiver their feathers dry.

Tucked away under a tall Oak tree in the garden, a wrought iron bench offers visitors a place in the shade, a nice breeze and a place to daydream.

Butterflies of all shapes, sizes, and markings gather and dance among these stair-step blossoms of various native vessels. Monarchs arrive in mid-October to rest before continuing their migration farther south. I nhaling the sweet nectar of orange and red Milkweed they slowly open and close their magnificent copper and dark vain wings. Monarchs, taking their last stroll through the garden, are offered nourishment from red, yellow, pink, purple, and white breasts glowing in the sunlight to attract their prey.

My favorite place in the garden is the wrought iron bench. It is a peaceful cool place to sit in the afternoons where I can

watch Donna. Dressed in her ragged blue coveralls, with torn knee, and scuffed shoes she tugs at long, green, connected, garden hoses as she moves from bed to bed, watering and pampering each and every plant. She is like an angel assigned to this garden. I smile and watch her drift into unknown, mystic, deep thoughts as she bends down to pull a weed. Bending



closer to the ground, she is able to focus on an unusual crawl-

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ing insect. Forgetting anyone is near she offers a sweet hello. A vision in motion as butterflies, moths, bees, and wasps flutter, hover, and rest on selected nectars. Several of them battle over pieces of squishy, rotting fruit in a shallow dish of moistened pebbles that Donna has furnished.

Pipe-vines, Giants, Eastern Tigers, and Spicebush swallowtails help themselves to the different plant nectars. The Fritillaries, Painted Ladies, Sulphurs, Skippers, Bordered Patches, and the Queens all dance to their own silent tune. They keep your eyes and head rotating as they bath in the suns warmth throughout the day - sometimes mating in flight.

The most active times are between ten and two when butterflies with all their Latin names flock and visit the garden.

Look over there! It's a pipe-vine swallowtail flittering in jagged motion, bouncing from plant to plant, and flower to flower, seldom resting its wings for my digital camera and shaky hand to snap a clear shot.



Here comes another Giant Swallowtail with large open wings, flexing his bold black and yellow shoulders, and gliding past as if posing for the paparazzi. Next a Tiger Swallowtail joins the fashion show, spreading his bright yellow and black "tiger" stripe cape. Strutting around from plant to plant, he acts as if he were Elvis himself entering the stage. Keeping in style with the rest, the shy common sulfur quickly folds her wings and blushes as she drapes herself around nearby porterweed, with its luscious deep purple flower, highlighting her rich yellow orange body. The porter-weed seems to be her favorite selection in the garden.

While admiring a well-fed, yellow and black garden spider hard at work weaving its web between two plants, I see Donna hold out her hand to a mellow, Gulf Fritillary, as if it were rehearsed. Gently it lands in her palm. Stunned, we slowly look at

each other. We can not believe the continued stillness. It slowly opens and closes its wings, telegraphing a thank you message to Donna for the food and nectar she provides.

Stretching out every last second in the garden, Donna grasps my hand and excitedly shows me the underside of a passion-vine. She lifts a milkweed leaf and asks if I can see the fritillary caterpillars munching away on the underside of the host plant. As a last effort to keep us there, she points out another caterpillar busy working its way along an adjacent vine toward the wire fence where it will attach itself before spinning into a chrysalis.

Time doesn't give up as it points its urgent finger toward the sky to let us know a storm is brewing.

Exiting slower than when we entered these gates, we feel blessed and more appreciative for life - for each other - and for nature. Walking away from the garden and toward the house, I take with me an artistic pallet of memorable colors found in the dainty petals, winged butterflies, and other insects. It is a gift from God that captures the hearts of those who visit this painting of nature's glory.

The latch on the garden gate door will be less active as fall starts shedding its leaves. Winter will soon follow.

The north wind will pick up its tempo and rattle each leaf. The petals will sadly lower their heads and fade in color. Seed pods will wither and dry as they listen for the sound of music in the wind. The pods will tremble, as the wind puckers its lips and makes a wish that scatters the seeds.

In the cold days and nights of winter the winds will howl, snow will blanket the garden, me and the dogs will curl up by the wood-burning stove, and Donna will sit nearby in deep thought as she studies her notes, reads her many native flower, butterfly, and bird books, and thumbs through thousands of my blurred photo shots to find what worked, and what did not, as she plans for the next spring.

Spring - when the fields come alive once more!

- by Linda McBride [Ed.—all photos from the internet]



Dry Times are High Time for a Good Time Outdoors

By Tim Siegmund, Regulatory Biologist for TPWD

About a month ago at 11 o'clock at night there I was going from the front porch to the TV and back; looking outside at the northern sky then rushing inside and watching the weather radar on TV. About every 5 minutes back and forth I would go; hoping and praying that the line of storms on the TV screen would materialize in real life in the night sky. The cloud to cloud lightning soon highlighted the storm fronts arrival, and in time the first drops began to fall. These drops slowly turned into a steady drizzle, which progressed to a prolonged (especially by this year's standards) soaking rain for

about an hour. So, for that full hour I sat and watched the rain either from the porch, or when the wind blew too hard from the comfort of my living room window. You can ask my



wife, I was almost too excited that it had finally rained. We received about an 1.5" of rain that night, and it was followed by another inch about a week later.

These two rains beat our total rainfall here in College Station, and most of the surrounding area from mid-January through the 10th of May. It had finally....RAINED, and it didn't take long for the parched landscape to respond. Some wildflowers in my front flower bed wildscape perked up (Turk's cap, lemon beebalm, black-eyed susan, and Texas lantana), the bees and butterflies seemed busier, the American beauty berry was no longer wilted, rain lilies were sprouting, and even the post oaks looked like they had perked up. Now, about 5 weeks removed from those rains things are beginning to turn brown again, and looking at the 10 day forecast near record heat, wind, and low chances of precipitation seem to be what's on order. Summer has arrived in Central Texas.

Dry spells are something our area of Central Texas has been experiencing for thousands of years. It is important to remember that if we had large amounts of dependable rainfall that our area would not have historically been a tall-grass prairie or Post Oak Savannah, but Eastern Deciduous forest. The combination of drought and fire is what shaped our area and the flora and fauna that inhabit it. This is why a 3 week wet period amidst a 35 week dry spell can have such a dramatic response from the plant community. A quick flush of

growth, flowering, seed setting, and dying is accomplished by many plants with minimal amounts of moisture.

This brings to my mind an important aspect in plant, wildlife, or life management. Always prepare for lean times, and never rely on consistent, optimal conditions for success. Our native Texas wildflowers are a great example of this strategy. In good years large amounts of blossoms create copious amounts of seed to be dropped onto the soil. Here the seeds lie dormant many viable for years, and some for decades or longer. These seeds serve as a "savings account" for the species. If a dry year or multiple dry years follow this bumper crop a few individual seeds in optimal locations may germinate and flower, but the rest sit and wait for better growing conditions. In this way the species has ensured it's survival by maintaining a "savings account" of abundant, viable seed in the soil. Patience is a virtue, and these seeds patience and ability to lay dormant waiting for better growing conditions allow us to enjoy a colorful Spring in wetter years.

I encourage you as those who enjoy nature to get out and find the beauty in this dry weather. The flush of growth from wetland plants in dried up creeks, ponds, lakes, and oxbows. You can marvel at how the sunflowers and Indian blankets seem unaffected by the dry weather. The ability to go out

and see a large amount of animal tracks concentrated around your pond or watering area in the mud. The collection of pollinating wasps, flies, beetles, bees, butterflies, and moths concentrated around the few flowering



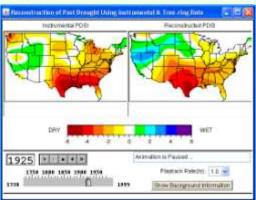
plants available to them. Drought has the uncanny ability to concentrate animals around dwindling food and water resources which can make for excellent and unique viewing/ photo opportunities. With patience the habitat and growing conditions will improve, and life will go on for all of these species. Whether it be this year or the next, rainfall will return and these species can once again fill up their "savings account" for survival.

Post-Script:

Here is some information that might interest some about our climate:

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This map is from NOAA detailing the nation's precipitation data using the Palmer Drought Index for 1925 (not much different this year). These graphical maps can be found at their

website, which makes for some interesting viewing, and has models going back to the 1730's based upon instrument readings, historical accounts, lake sediment data, tree ring data, and pollen data.

Take a look at http://www.ncdc.noaa.gov/paleo/drought/ animation/pdsi_animation.html to see more.

Also, listed below is some interesting precipitation data from a NOAA drought bulletin dated May 27th.

Driest October 1st-May 26th (238 days) since 1925 for College Station, TX:

- 1) 9.05" 1925
- 2) **9.37" 2011**
- 3) 13.30" 1917
- 4) 13.43" 1951
- 5) 14.77" 1971

This year is the 2nd driest on record for the October 1st-May 26th time period in the over 110 years of recorded weather data in College Station. There are few folks alive who have experienced drier conditions during this Fall-Spring time frame.

By: Tim Siegmund, Regulatory Biologist, TPWD [Photos from internet public domain, via Fair Use Policy]

Bird Showers and Shows by Ann Collins

It is so hot and so dry and it isn't even summer yet. What will August be like? The other night about 7:00 o'clock I decided to open the Chimney Hill Water Park for my bird friends. So, I hunted up a new sprinkler that Carter had bought that morning. Sprinklers!!!!!! Why is it that we have to replace them so often? My Daddy had one that lasted for about fifty years; I think my sister is still using it! Not what I want to talk about.

Anyway, I turned the faucet on full force and sat down on the deck steps to wait for my friends to arrive. The first to get there were nattily dressed in bright red swim suits, some with black trim. Where do these poor creatures go during the heat of the day? No air conditioning! Are they just acclimated to the heat like we all were when we were kids?

Enough about the heat, I need to relax and enjoy the show. Those first arrivals really did put on a show. They seem to love the full blast of the water. No mist or waiting for drops to just drip off the leaves of the trees. The males

typically dove right in. The females were a bit more hesitant but soon got the idea and gave the guys a run for their money. A couple of black beaked youngsters showed up and figured out what it was all about. Hope you guessed that these were the Northern Cardinals.



The next to arrive were dressed in drab gray suits with a splash of russet down the sides. They came in force. Very

quickly the trees were just full of Tufted Titmouse that darted into the water then flew to the tree tops to forage. There must have been twenty-five or so all singing their little whistling tunes. They came to eat and enjoy the park. First they would fly to the feeders to my left and then to the ones on my



right, then back into the water. What a show!

Oh! Look! There are two birds that I hear many times a day but hardly ever get to see at close range. Yellow bellies, kind of olive on the wings and back, two white wing bars and they are sporting bright yellow swim goggles. A pair of

them! I watch their antics with utter fascination. Hardly ever do I get to see such a wonderful display. Can you guess what they are? Their song says, according to some, "Quick with the beer check!" Good for you! They are White-eyed Vireos.



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What's that one? He hardly exposes his gaudy dress at all, just darts quickly from short hop to quick jump. Then he dives into to dense shrubbery. But, he can't resist the lure of the afternoon shower. So, he jumps back up then dives quickly into the brush again. This little fellow nests at the base of trees and I fear for a second that the water has interrupted

his/her nesting activity. No, he's back to his quick darts into the water. He is really shy. His attire is an almost perfect camouflage. You wouldn't think so when you get a really good look at him. Stark black and white stripes, dots, and dashes mark his tiny body.



The first time I saw one of these on my property I nearly fell over. I couldn't believe my great good fortune. They are quite secretive and very difficult to distinguish in the dense brush. I still stop dead in my tracks when one surfaces. I have no idea what kind of song they sing so unless I actually see one I don't know they are there. Did you guess Black and White Warbler?

Why are wrens described as "drab"? They are the noise makers and the clowns of my bird world. As they screech and scream and dive bomb the sprinkler I am once again fully en-



gaged and entertained by their moves. Their stiff little tails pump like young boys flexing their muscles poolside. They, too, are fast but so uninhibited that they almost ask you to play with them. They soon tire and fly away to investigate something else that has caught their attention. What busy bodies the Carolina Wrens

Carter's favorite bird is also there in large numbers, hanging upside down to catch drips from leaves and stems. They don't seem to like getting a full blast of water but rather enjoy the mist. These little creatures have many songs in their repertoire. It took me a long time to recognize all of them. They are still capable of fooling me now and then.

They tend to run in gangs. If you see one alone he is usually singing atop a tall dead limb calling someone out to

play. They are busy little critters hungrily devouring small insects and caterpillars; gray, with stark black and white on the head, and black caps. You may confuse them with the Black-capped Chickadee but the ones we have around here are the Carolina Chickadees.



So, if you get bored you might try running your own version of a water park. It is guaranteed to amuse you and you will be doing our poor woodland creatures a favor. Watch out for the snakes!

By Ann Collins



BADII



GOOD!!

[Ed.—All photos are from the Internet Public Domain under the Fair Use Law..]

My Updated Plan for Thirsty Summer Friends by Dorothy Mayer

Last year, I wrote about the toad that accidentally drowned in a watering dish due to lack of an escape plan on my part. But, this year I thought I had an escape route covered for my thirsty friends. However, since last summer I have adopted an almost grown and somewhat overgrown Black & Tan Coon Dog /Australian Shepherd puppy who loves to play in the water when he gets hot or whenever the inclination comes to his mind. So, new doggy continually knocks over the rock steps that I had so carefully placed in the watering tub, thereby dismantling my planned escape for all my visiting wildlife friends.

Luckily for this toad, I found him dangling in plenty of time to save him from a watery fate. However, due to others playing in the water (I've noticed coon, possum, and/or skunk prints at my neighbors' wildlife fountain), I am having to watch more vigilantly and am working on a more permanent solution for future visitors to be able to play in the water a bit and then safely go on their merry ways.

I also want to add that my sister even had a bird drown in her cattle trough a couple of years ago. And, if you think about it, they warn us that children can drown in as little as a bucket of water. Therefore, you need to be watchful even if all you have out with water in it is a small water bowl for a pet. Slick, slimy water dishes with smooth interiors usually have no toe hold for a small toad to use to get out of that nice, cool water.

So, again, I just wanted to remind everyone that, especially during drought conditions, please remember that even if wildlife can swim, they can still drown if they can get in the water, but cannot get out for long periods of time. So, be careful and be watchful because all of our fuzzy, feathered, rough & slimy friends get thirsty. Also, be especially watchful for our snake friends also get thirsty. Therefore, if you see snakes near your house don't panic, they are probably just thirsty for a drink of water and that water hose makes your place seem especially inviting. They are not out to get you and will try to avoid people, but they do get thirsty too. Also, the majority of them are not even venomous and almost all do more good than harm. People's ignorance is the biggest problems where snakes are concerned.

To sum things up, build it and they will come. Just remember that if you build it, your visitors are dependent upon your planning and your judgment. And, keep in mind, too, that snakes are supposed to be here.

So, get outside and enjoy nature more this summer. I know the temperatures get really hot in Texas, but wildlife is most active in mornings before it heats up and in evenings when it starts to cool down a bit. Just like when you were a child, nature is still there and is still free for you to enjoy. And, that is just still "way" cool. Don't you agree?

Story and Photos By Dorothy Mayer









The Worst Baby Names Ever

by eNature.com

Posted on Tuesday, March 29, 2011 by eNature.com



Common Loon with chicks

We all know about colts, calves and eaglets—but even experienced naturalists sometimes can't remember the names for certain species. The various and oftentimes bizarre names used to describe animal offspring are often stumpers to even the best Trivial Pursuit player.

For example, a baby toad is called, appropriately enough, a toadlet. On the other hand, a one-year-old male turkey is called a jake.

Similarly, baby mice are known as pinkies, while the babies (caterpillars) of Giant Swallowtail butterflies and Regal Moths are known as Orange Dogs and Hickory Horned Devils, respec-

As for the ghastly named Hag Moth, it fares no better in the larval stage, when it's called a Monkey Slug. Young elephant seals, meanwhile, are known as weaners, young cod as sprat, and young mackerel as blinkers.

And while there are lots of calves, pups, and kits, only the louse gives birth to baby nits.

[Reprinted from eNature.com]

[Ed.—And on and on it goes: Kangaroo—Joey, Owl—Owlet, Partridge and Quail—Cheaper, Pigeon—Squab or Squeaker, Rooster-Cockerel, Sheep-Lamb or Lampkins, Swan-Cygnet, Turkey—Poult, Hawk—Eyas, Goose—Gosling, Salmon—Parr, Smolt or Grilse, and I'll end it with: Fly—Maggot! Now let us not get started on all the crazy names for groups of different species. Who thinks up all this stuff anyway?]

A Hummer in the Web by Ann Collins

Something always stands out in the year of observing the many Hummingbirds that pass through my yard. This year I was sitting out on the front porch one morning when I became aware of a continual motion in one of the tall oak trees. As I looked closer with my binoculars, I could see a tiny hummer caught in a very large spider web. Fortunately, the large brown spider was steering clear of such a large "bug" caught in his trap.

The web was at least twenty feet off the ground. I got our eight foot metal ladder and a long stick and was not much closer to the poor trapped bird. Since my husband is taller, I enlisted his aid. As he stepped on the ladder it began to vibrate quite loudly. He jumped back and started over. Again the ladder vibrated. About that time I realized the hummingbird had finally escaped from the web and was trying her best to fly away. She had landed on the ladder but was so entangled in the web that all she could do was vibrate.

I scooped her up and pondered how to go about removing the very sticky, wet web from her delicate feathers. My fingers were useless, just smearing the web further into her

body. I sent my aide to get water and some Q-tips. This helped but didn't come near solving the problem. By this time, my tiny patient was just about soaked.

I held her in my hand, trying to keep her warm and possibly

dry her a bit. After a while she was able to move her wings and was struggling to escape from an even worse trap. She had traded a spider web for a giant hand! It looked like her



day couldn't get any worse.

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But, it could. I thought she might be able to fly so I let her go. She flew into some bushes at the edge of the porch and sat there for a moment. She then tried to fly but simply dropped deeper in the bushes. My cat was on the porch and

had been largely ignored but was intrigued by the commotion in the bush. She began to stalk.

Well, I practically jumped into the bushes, some of which had some pretty sharp thorns. I was



not about to allow this tiny life to be snuffed out by some fat cat! After I had crawled on my knees to rescue the hummer I had to go to Plan B. I again, held her in my hand debating how to proceed.

In the potting shed I had some clear plastic grape containers and got one of them and put a small twig in it . I then gently put my charge in and closed the lid. I had a feeder with one of those clear plastic tubes with a red tip on it, so I stuck it through one of the air holes on the side. At least for now she was safe.

She was resting on the twig and ignoring the feeder and seemed to be doing quite well. I took her into the kitchen and set her on the counter. Now I began to think of this as an really good opportunity to get some great pictures of a Ruby throated Hummingbird. How self seeking! The shiny plastic kept me from getting even a glimpse of her. The next best thing was to open the lid and get a really good look. Mistake!

When she realized the lid was open, being nobody's dummy, she instantly flew out. I rushed to close all of the doors to

keep her in the kitchen and sunroom. The ceiling in the sunroom is thirteen feet tall so, once again this height challenged person had a problem. Fortunately, I have a butterfly net which I hunted up while my poor little bird faced yet another challenge: a room full of windows to bang into and not a one of them open.

I was quickly able to catch her with my net and made the difficult decision to release her. At least I knew she could fly again. We went out to the deck in the back and I opened my hand and she flew straight up to the top of a very tall tree.

I, of course, kept looking for her for a day or two and had to take on faith that she had survived and was doing well on her own. I hope she recognizes how to better handle a spider web after this.

- a true story by Ann Collins

[Editor note: as you all may know, hummingbirds regularly use spider web silk to bind their nest to limbs and hold it together, before decorating with lichens, etc. They may even eat the spiders or feed them to their young. So keep an eye out for a stuck hummer on your property. All photos from the internet public domain.]







Milam County

Los Caminos Summer 2011

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Certifications, Etc.

By Cindy Bolch

Achieving Certification: Kathy Lester, Sandy Braswell, and Vickie Braswell



Our 2011 re-certification pin is the Horned Lizard, our State Reptile.

Achieving 2011 Annual Re-Certifications to date include: Cindy Bolch, Katherine Bedrich, Lucy Coward, Sue Taylor, Don Travis, Paula Engelhardt, Dorothy Mayer, Janice Johnson and Donna Lewis

Lifetime to date Milestone Achievement Levels Awarded include:

250 Hours—Paul Unger, Ann Collins, Katherine Bedrich, Cindy Bolch, Paula Engelhardt, Don Travis, Debbie Harris, Joy Graham, Lucile Estell, Shawn Walton, Anne Barr, Ed Burleson, Connie Roddy, Dorothy Mayer, Lucy Coward, Donna Lewis, Sue Taylor, Phyllis Shuffield, Sandra O'Donnell, Jim O'Donnell, and Vivian Dixon

500 Hours—Paul Unger, Ann Collins, Katherine Bedrich, Cindy Bolch, Paula Engelhardt, Don Travis, Anne Barr, Donna Lewis, Phyllis Shuffield, Lucy Coward, Debbi Harris, Dorothy Mayer and Sue Taylor

1000 Hours—Paul Unger, Ann Collins, Katherine Bedrich, Cindy Bolch, Don Travis and Paula Engelhardt

2500 Hours-Paul Unger

Congratulations to All!

Did You Know?

How do birds eat seeds without teeth?



Most people, even most kids, know that birds have no teeth. Likewise, it's common knowledge that quite a few birds consume almost exclusively hard foods such as grains and seeds. So how do birds digest these tough morsels if they can't chew them into more edible pieces?

The answer lies in a bird's stomach—in the lower part of its stomach, to be specific, the area called the gizzard. It's here that the powerful mixing and gnashing of food that occurs in human mouths takes place in birds.

But rather than bicuspids, molars, and the like, the gizzard uses small rocks, shells, and sand to break apart hard foods. The bird swallows these rocks and whatnot specifically to help with digestion. And when they wear down, as inevitably happens, the bird simply passes them

on as waste and consumes a fresh supply. Almost every species of bird has a gizzard, as do some species of reptiles, earthworms and fish. A bird's gizzard has thick, muscular walls and is lined with a protective substance known as koiln. So having a gizzard is a bit like having a drawer filled with spare teeth—only without the dentist's bills! [reprinted from eNature.com]