

ARLINGTON CONSERVATION COUNCIL

POST OAK

ACC WORKS TO PROTECT ARLINGTON'S NATURAL ENVIRONMENT THROUGH EDUCATION,
COMMUNITY SERVICE, AND ADVOCACY FOR A SUSTAINABLE FUTURE

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MARCH 2015

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March Meeting

Early Results of Downwinder's Ozone Modeling Project

Jim Schermbeck, Executive Director,
Downwinders at Risk

Wednesday, March 4, 7 pm
Fielder Museum, 1616 W. Abram St
(corner of Fielder and Abram)



For the first time, local DFW officials and citizens are duplicating air quality modeling that has always been the exclusive province of the Texas Commission on Environmental Quality. The project promises to provide new and compelling evidence of the impact of effective pollution controls on major point sources of air pollution.

Bring something for the raffle!

Bits & Pieces

Terrific Tufted Titmouse

It's cold and snowy but the titmice still keep dashing to the feeder, grabbing one seed, and disappearing fast. They may be flitting off not to eat but to hoard that food nearby. And no mixed winter flocks for them: Most pairs occupy their breeding territory all year. That space ought to have some dead wood so they can find good nest cavities year after year: The oldest known wild titmouse lived over 13 years!



Today's Inspirational Moment



"I'll leave it in the hands of God. He's handled our climate pretty well for a long time."

*Lieutenant Governor Dan Patrick,
while campaigning last year
(More on page 5)*

You Really Should Get These

Did you like the plastic bag ban piece last month? It came to us from the generous folks at Green Source DFW. Every week they report on a wide variety of local environmental matters, and you can sign up for their excellent newsletter at greensourcedfw.org.

How about last month's article on trout lilies? Jim Varum, our indefatigable natural historian, shipped that over almost before your editor finished asking.

Want more? Just email jvarnum@aol.com and you'll receive Jim's This and That every month. It's a quirky grab bag of mostly natural history topics and an exhaustive calendar of events.



From the President Danny Kocurek



What Can I do to Help the Bees?

I get this question often. Sadly not as often as, "What can I do to lessen climate change?" which is a much bigger problem. But helping one does help the other. Here is how I respond.

People worry bees don't have a place to make a colony, but they are very resourceful and finding a home is never a problem. Unfortunately they love to make colonies in walls of houses and water cutoff boxes because they are abundant and perfectly sized. Keeping your house well caulked will save you electricity and keep the bees out. Mostly they live in old trees, so leaving parks and streams wild helps them find abundant homes.

People also think they need to plant flowers for the bees. While planting natives will help bees, along with butterflies and others, the best way to help the bees is to stop mowing. An unmowed field of grasses, groundcovers and wildflowers is the ultimate smorgasbord for bees. A well manicured lawn is as unappealing to bees as it is to ACC members. Encouraging a "no mow" policy for city parks can really help.

But perhaps the best way to help the bees, and the planet, is to stop using pesticides. Although the link between pesticide

use and colony collapse disorder is not definitive, the overuse of pesticides is harmful to all beneficial insects, including bees. Pesticides are also not good for humans, but that is a longer topic.

Editor's note: Just today (Feb 27) there was a timely interview on public radio about introducing bees onto green spaces at some major airports. Listen to it at [Science Friday](#) and you'll come away encouraged. There's more on this in an excellent [New York Times](#) article that describes the European beginnings of beekeeping at airports and relates developments at some US airports. One very big question: What's happening at our local airports?



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conserve Arlington's
natural resources.**

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Blackland Prairie Nature Preserve Jan Miller Photos by Wes Miller

The last week or so has brought North Texas a taste of winter....enough to shut down outdoor activities that are welcome this time of year. Other parts of the country have had it much worse, but it hasn't stopped them. How do they do it? Take a look at these prairie wetland fans in Star Prairie, WI for their Winter Walk on Valentines Day...even the dog's wearing a coat!



The Friends of the St. Croix Wetlands Management District braved temps of -2F and wind chill of -17F, bolstered by bright sunshine, a bonfire, and restored by hot chocolate served from a camp stove. For their full story, see:

<http://www.newrichmond-news.com/life/3682692-bitter-cold-greets-hearty-winter-walkers>



Public Comment Period Ends Friday, March 6, 2015 National Historic Trail Designation for Chisholm and Great Western Trails

This designation would help our heritage and tourism industries as well as providing regional recreation and educational opportunities since the Chisholm Trail runs from South Texas through Tarrant Co. to Kansas and the Western Trail from South Texas through Shackelford Co. to Nebraska. Just click on the link below and indicate that you (and your organization if possible) support the Chisholm/Western Trail designation.

Also included in the link below is the National Parks Service Feasibility Study/Environmental Assessment, which is an interesting read from historical, ethnological and environmental perspectives:
<http://parkplanning.nps.gov/document.cfm?parkID=456&projectID=30803&documentID=63251>

Blackland Prairie Nature Preserve (BPNP/NYABP)

Volunteer efforts at BPNP have long focused on management of invasive trees and shrubs that are destined to dominate the prairie in the absence of fire and/or grazing. APRD mows once a year and volunteers have cut and re-cut trees over the years, but so far only on the west side of the preserve. As a major step in managing the entire site for restoration, a mowed perimeter has been suggested. It would allow better access for walking and equipment (if needed) and easier management of wind-dispersed invasives. As part of March Stewardship Day, we'll walk the preserve's boundaries and assess what will be needed to establish a perimeter.



3rd Saturday Stewardship workday Blackland Prairie Nature Preserve 4907 New York Avenue March 21, 9:00 am - noon

Participate in restoration and management activities at this rare blackland prairie remnant. This month we'll multi-task with the boundary walk (see below left), litter pickup...and look for spring wildflowers! Photo and birding opportunities too.

Please wear sturdy shoes or boots and long pants.

See the links below for more information:

Friends of the Prairie www.theprairie.org

Friends of the Prairie e-mail
info@theprairie.org



Thanks to our last speaker

We had a full house at the February meeting when we heard a great presentation by Rita Beving, North Texas Outreach Coordinator for Clean Water Fund/Clean Water Action. Understanding Water in Texas was the topic, and Rita covered a wide range of topics with enthusiasm, patience, and expertise. It's clear that our water situation demands action, beginning with a massive and meaningful conservation effort, one that is seriously explored and implemented before we destroy more irreplaceable habitat with giant, wasteful reservoir projects. (Photo: Rita Beving, left, with Jan Miller, February speaker chair)



Your editor asked Rita for information on one shocking point. See below for excerpts from the article Rita recently supplied.

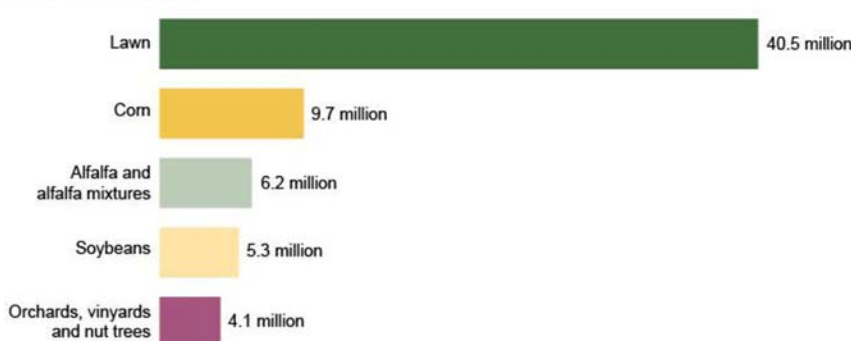
Lawns vs crops in the continental U.S. Francie Diep, Scienceline, posted July 3, 2011

Homes, golf courses and parks may grow more acres of turf grass than U.S. farmers devote to corn, wheat and fruit trees — combined. In a study published in *Environmental Management* in 2005, researchers estimated there are 40 million acres of turf grass in the U.S., covering 1.9 percent of the land. If all that is kept well watered, it could use 60 million acre-feet of water a year (An acre-foot is the amount of water needed to cover an acre to a depth of one foot). Turf grass might be the U.S.'s largest irrigated "crop," wrote the research team in their paper. Here's a closer look at how lawns compare to some of the U.S.'s top agriculture and what that means for individual homeowners.

Four times more lawn than corn: Top U.S. crops by land area

There may be more acres of lawn in the U.S. than of the eight largest irrigated crops combined. Here are figures for the top four.

Acres of irrigated land



After orchards, the U.S.'s next four largest irrigated crops are cotton (4 million acres), pastureland (3.6 million acres), wheat (3.3 million acres) and non-alfalfa hay (3.2 million acres).

Four times more water than hay: Top U.S. crops by water use

The turf grass researchers estimated how much water it would take to keep all the lawns in the U.S. well watered using two different watering methods. The more conservative estimate, in which caretakers make sure their lawns receive 2.54 centimeters of water a week through a combination of sprinklers and rain, would use more water than the seven greatest water-using crops combined. Here are figures for the top four (above right).

Acre-feet of water used in a year



After rice, the U.S.'s next three thirstiest crops are pastureland, which uses 6.2 million acre-feet of water; cotton (5.7 million acre-feet) and non-alfalfa hay (5.5 million acre-feet). An acre-foot is the amount of water needed to cover an acre to the depth of one foot.

Top crops in each state: Mostly lawn, but a heart of gold

In most U.S. states, there could be more lawn than any single irrigated crop. Hay predominates in the West, however, and in Nebraska and Kansas, there are more acres of corn than anything else.

What does this mean for your lawn?

Watering the lawn generally accounts for 50 percent to 75 percent of a home's water use during the summer. To save water and money, Milesi suggests choosing more drought resistant turf and adjusting your watering schedules to fit the weather and season. Many cities have suggested or required water schedules for different times

Puzzling speaker choices for Earth Day Texas John Darling

A while ago somebody called to ask if I would talk about compost at the big (very, very big) Earth Day event in Dallas. I hesitated because I've heard some negative things about it, including huge fees required from non-profits to participate. For a while I tried to find them a compost speaker from Dallas County. Apparently Dallas doesn't have a Master Composter program, and several cities that do haven't figured out how to return phone calls. I finally declined the offer, offered a speaker possibility, and forgot about it until an interesting article came my way.

This is it, from a *Dallas Observer* blog: [Why Is Climate Change Denier Lt. Gov. Dan Patrick Invited to Speak at Earth Day Texas?](#) You can read the whole thing at [Environment](#). The gist is that Patrick, Attorney General Ken Paxton, Railroad Commissioner Ryan Sitton, and *The Skeptical Environmentalist* author Bjorn Lomborg have all been invited to be among the key speakers at an inaugural Eco-Conference on Friday, April 24. According to the article, the specific views of Paxton and Sitton aren't known, but their general political leanings make them unlikely environmentalists. The main point of controversial author Lomborg's best-known book is that many of the most-publicized claims and predictions on environmental issues are wrong.

Given all this, the big question for a lowly would-be compost speaker is why have these luminaries been invited? After all, the organizers describe the mission of Earth Day Texas this way: to [elevate environmental awareness and influence the way Texans think, live and work](#). Sounds good, but it's hard to see how those guys are going to contribute to that lofty goal.

The environment has lost a great friend

Ulrich O. Herrmann, a professor of physics at UT Arlington from 1961-98 who was instrumental in creating the University's astronomy program, died January 14 at age 89.

A memorial service will be held at 2 pm Saturday, March 21 at First Jefferson Unitarian Universalist Church, 1959 Sandy Lane in Fort Worth.

Dr Herrmann was born March 27, 1925, in Schneidemuehl, Germany. Following World War II, he completed college, met and married his wife, Marianne, in 1953, and earned a Ph.D. in Physics. He and Marianne immigrated to the United States in 1956. They moved to Arlington in 1958, and in 1961 Dr Herrmann began teaching physics at UT Arlington, which was then named Arlington State College.

In addition to helping to create UT Arlington's astronomy program, Dr Herrmann helped secure funding to convert the Roundhouse structure adjoining Preston Hall into the university's first planetarium. He first proposed the idea in 1975, and in 1981 the planetarium opened. He was an extremely popular professor for thousands of UT Arlington students, and he also volunteered as a teacher in the senior program at Tarrant County College. He enjoyed travel, photography, skiing and camping, and was a member of the Sierra Club, among other organizations.

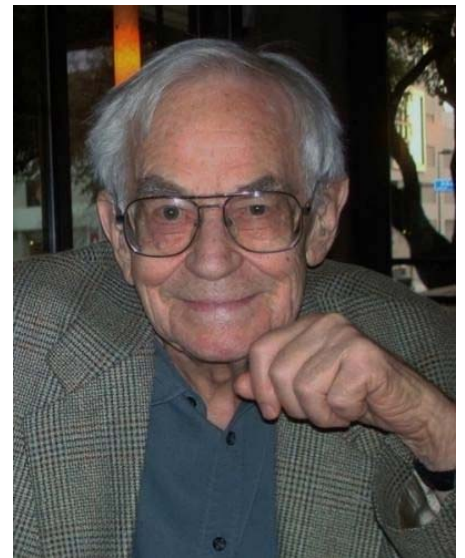
Survivors include his wife, Marianne; daughter and son-in-law, Karen and Paul Hagerty of Rock Island, Ill.; son and daugh-

ter-in-law, Roland and Lisa Herrmann of Longmont, Colo.; and four grandchildren. Memorials in Dr. Herrmann's name may be made to the Nature Conservancy or the Sierra Club.

That's UTA's version. Here's a thought from founding ACC member John Blair: I knew Ulrich since the mid 1970s, from church. He and Marianne were very active members back then.

Problem is, my funniest memories of Ulrich are probably unprintable, but here's one: Years ago when I was regularly biking the north Arlington trails from River Legacy over to the park just west of Interlochen, I ran into him at the latter park. He was walking briskly along the path out to the street. We stopped and chatted a bit and he admitted he made regular trips to the park to turn loose squirrels he had been live-trapping off his deck at home to keep them from eating up all the birdfeed he and Marianne had been putting out. Problem is, even at a mile away, the squirrels, he was convinced, had been finding their way back to the Herrmann house almost as fast as he did! Being Ulrich, he of course had a very profane exclamation to express his feelings about the problem. But he was persisting in the effort, nonetheless, very methodically.

The last time I saw Ulrich was just last year at an ACC meeting. I miss him, his wry wit, his encyclopedic knowledge and, believe it or not, his patience with me.



A couple of thoughts from your editor: I can picture Dr Herrmann at several city meetings, employing that wonderful voice to bluntly point out some variation on the fact that the emperor had no clothes. This was inevitably followed by a moment of silence and a burst of much-needed laughter.

And once, while camping in New Mexico mountains with one bored teenaged daughter and her equally bored friend, we bumped into the Herrmanns. One very starry night I couldn't help but eavesdrop while he produced an impromptu astronomy lesson (much more than a lesson!) that captured the minds of those jaded girls and had them asking for more, long into the night. Magic.

Wildscape Update Marylee Thomason

Do You Like to Eat Mushrooms?

A man who frequents the wildscape has talked to Master Naturalist and wildscape volunteer Bev Crawford about eating the berries from cherry laurel trees and coral berry plants. His gastronomical curiosity reminded me of my great-great-grandmother, Arminda Rice. She grew up during the 1870s in a cabin in the middle of an Ohio pine forest.

All winter the family meals consisted of dried or canned food and game. By spring the children were starved for anything fresh. When the snow melted, their mother would send them out into the forest. Mother would say, "Have fun, but don't eat any mushrooms!"

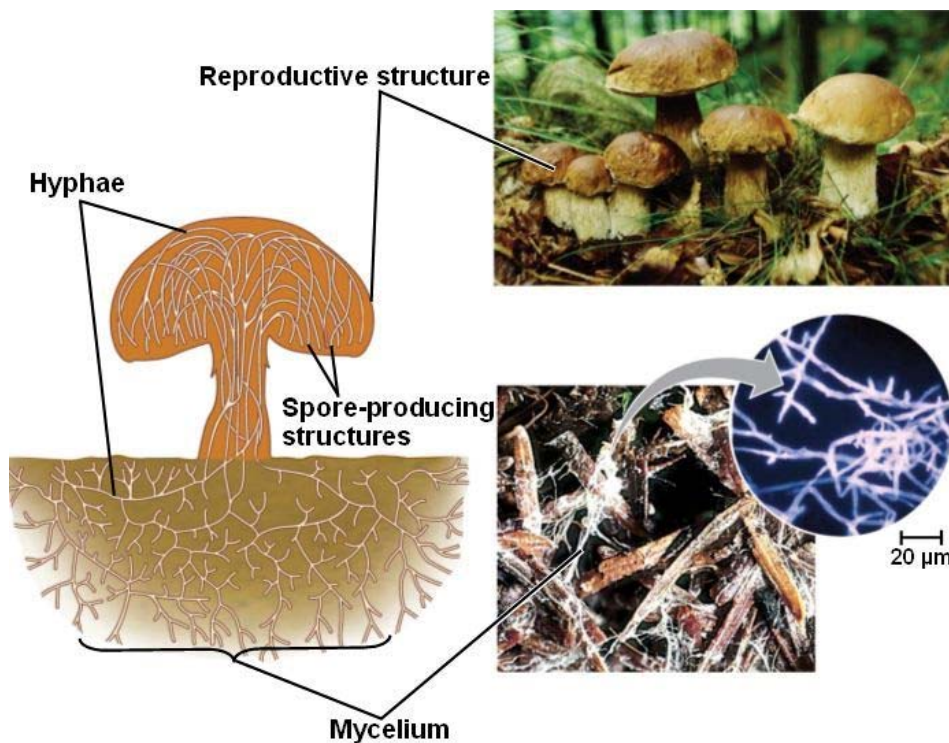
Mushrooms can provide great health benefits or a quick death depending on which ones you eat. They're tricky, too, because they don't advertise their poisonous nature with colors or odd shapes.

The most deadly of the species, the death cap, is hard to tell from the very tasty and edible paddy straw mushroom. Only an expert seeing the unique shape, color and pattern of the spores under a microscope can be sure. No one knows why mushrooms use color at all since they fail to advertise "don't eat me" the way many species of insects and other animals do.



Death cap mushroom from button stage to full-sized fruiting body.

One fascinating thing about mushrooms is that we only see the "fruit" or fruiting body above ground. It is there to spread spores to far-flung places that mycelia might not reach, much the way some plants distribute their seeds.



The body of the mushroom is hidden in a substrate, soil, rotting plant or animal that it is slowly devouring. That body is a network of branching single cells called hyphae, which make up the mycelia. Since mycelia have no protective skin, they have developed powerful enzymes to protect themselves from the bacteria, molds, insects and yeasts that are sharing the same dead animal, soil or rotting tree.

They also lack a stomach to draw their food into while they digest it. Instead, mycelia exude digestive enzymes into their environment. When the material has been liquefied, the nutrients are absorbed through the cell walls.

Most mycelia only produce mushrooms once a year for a few days. The mushrooms seem to appear overnight because they develop so quickly. Instead of growing by cell division, they grow by cell expansion.

The complete mushroom first appears as a tiny pinhead or button with all of the cells of the full-sized "fruit" compressed. These are usually hidden in leaf litter or are too tiny to be noticed. When the air is cool and humid or after a rain, the mycelium pumps water into each cell of the tiny mushroom until it stands up.

Soil mushrooms mature in a few hours to days. Shelf mushrooms on trees can take months. All do better in moist, shady places because sun and wind dry them out.

For those disinclined to accept ape-like creatures as our ancestors, this next fact will be hard to swallow. Humans are kin to mushrooms and other fungi. Yep, we are more closely related to mushrooms than mushrooms are to plants.

Around 460 million years ago we had a common ancestor. It has been a few generations, but we still share some basic physiology: no photosynthesis, so we have to eat plant material, we both breathe oxygen and expire carbon dioxide, and we have similar proteins and enzymes. We also share a form of cholesterol, lanosterol, that has nothing comparable in the plant world.

Ever wonder why it's so hard to kill a fungal infection? It is because what works well to douse a fungus wreaks havoc on you, too!

So this spring run out on a rainy day and enjoy the woods. Have fun, but don't eat any mushrooms!

Government to spend \$3.2 million to help Monarch butterfly

US News & World Report, Feb 9, 2015

By Dina Cappiello

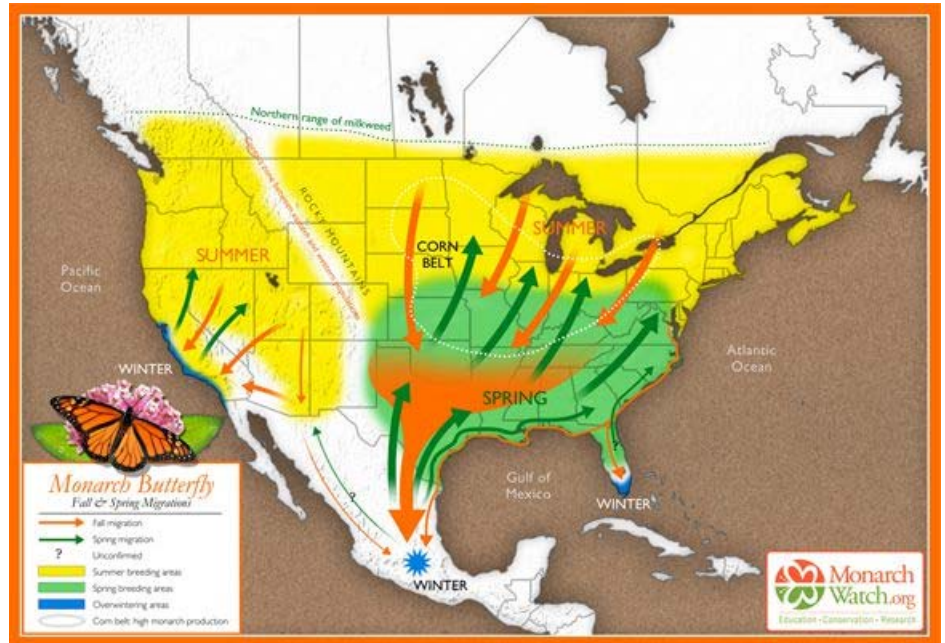
WASHINGTON (AP) — The federal government on Monday pledged \$3.2 million to help save the monarch butterfly, the iconic orange-and-black butterfly that can migrate thousands of miles between the U.S. and Mexico each year. In recent years, the species has experienced a 90 percent decline in population, with the lowest recorded population occurring in 2013-2014.

About \$2 million will restore more than 200,000 acres of habitat from California to the Corn Belt, including more than 750 schoolyard habitats and pollinator gardens. The rest will be used to start a conservation fund — the first dedicated solely to monarchs — that will provide grants to farmers and other landowners to conserve habitat.

The move by the U.S. Fish and Wildlife Service comes as it's in the midst of a one-year review to determine whether to classify the monarch butterfly as a threatened species under the Endangered Species Act, which would afford the butterfly more protection. In December, the agency said that there was enough evidence to trigger a review.

"The magic of the monarch butterfly is that little patches matter," said Service Director Dan Ashe at a news conference in Washington. Piece by piece, he said, "we can make a difference on a continental scale."

The monarch lays its eggs exclusively on the milkweed plant. Conversion of prairies



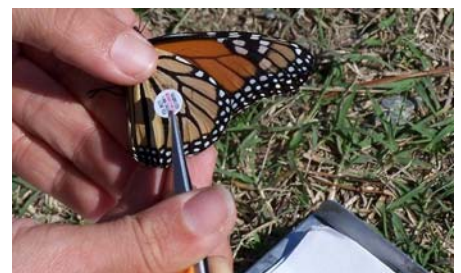
into cropland and the increasing use of weed killer-resistant crops have greatly reduced the extent of milkweed, officials said.

"It is weed control that is driving eradication of the milkweed plant," Ashe said.

The conservation projects will be focused on the I-35 corridor from Texas to Minnesota, areas that provide important spring and summer habitat along the butterfly's migration path. The species also faces challenges in Mexico, where its primary wintering grounds are being threatened by logging and climate change. Ashe said the hope was to eventually sign an agreement between Canada, the U.S. and Mexico to cover their entire range.

Environmental groups who have pressed for the butterfly's protection said Monday the announcement was a positive step, but said the species needs legal protection.

Monarchs are pollinators and indicators of broader environmental problems. Some populations migrate thousands of miles, across multiple generations each year from breeding and wintering grounds.



2003
27.48 acres



2006
16.98 acres



2010
9.93 acres



2013
1.65 acres

Monarch butterfly populations are rapidly declining.

Butterfly population is relative to number of acres inhabited during seasonal hibernation.

"The specter of listing will spur a lot of conservation for the monarch," said Tierra Curry, a senior scientist with the Center for Biological Diversity, one of the groups that asked the Fish and Wildlife Service last August to protect the monarch butterfly and set aside critical habitat.

But Curry said the butterfly needed to be listed for it to recover.

The plight of pollinators Grace Darling

Part I: Butterflies

Monarchs are emblematic of the struggle for survival of wildlife species on our increasingly developed and crowded planet. The decline in monarch population since 1994 is believed to be the result of its own specialized niche and migrating habit magnified by adverse environmental and climatic factors. Dr. Elizabeth Howard of *Journey North* puts it this way:

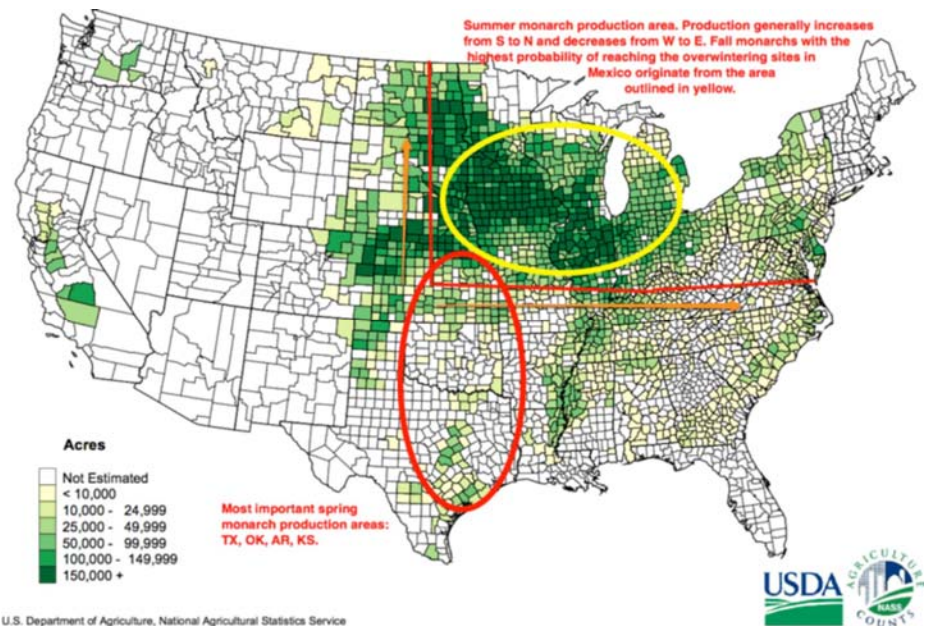
1. Challenges on Breeding Grounds

The monarch cycles through 3-5 generations during the breeding season. Only the final generation migrates to Mexico. Monarch caterpillars feed exclusively on milkweed. Historically, the U.S. corn belt has produced half of the monarchs that migrate to Mexico. However, milkweed habitat has been greatly reduced in the region due to:

New agricultural practices. Milkweed is being eradicated from corn and soybean cropland by the increased use of herbicides on genetically modified, herbicide-tolerant crops (GMOs).

In addition, more acreage is being planted in herbicide-tolerant corn to meet increased demands for biofuels. High corn prices push more land into production.

Weather extremes. Drought and excessive heat on the breeding grounds in summer 2012 are cited as key causes of the record-low population in Mexico the following



U.S. Department of Agriculture, National Agricultural Statistics Service

winter, reinforcing concerns about the potential effect of climate change on life on earth.

2. Challenges on Wintering Grounds

Monarchs migrate to a unique forest habitat in central Mexico. The butterflies depend on the forest microclimate to survive the winter. The entire population overwinters together in a very small region.

Deforestation. Illegal logging continues to threaten/deplete the monarch's forest and

disrupt its delicate microclimate.

Concentration of population. The fact that the monarchs concentrate in one place for the winter makes the entire population vulnerable to a single storm, drought, fire, or disease.

Ecotourism. High-volume, unregulated ecotourism threatens the integrity of the monarch's winter refuge.

Other socioeconomic pressures. The needs of the people who live in the region must be balanced with the needs of the monarchs. Humans and monarchs have competing needs for food, water, shelter and space.

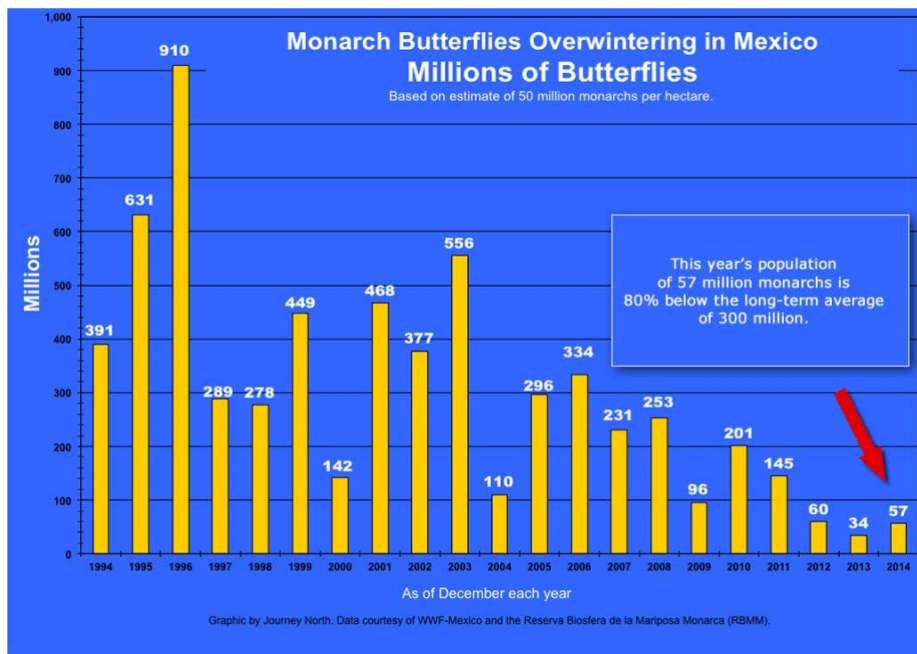
3. Challenges of Migration

Migration is inherently risky. Monarchs must find habitat to meet their needs every day of the journey. Like links in a chain, the loss of one habitat component could break the monarch's annual cycle.

The Monarch butterfly unites the three countries of North America in peace. It is an ambassador of peace which requires protected areas and ecosystems that are preserved through sustainable agricultural and forestry practices. Let us continue to work together to maintain a healthy and balanced ecosystem for all North America.

President Jimmy Carter

continued on page 9



The plight of pollinators continued from page 8



Part II: Bees

What is killing our bees? Bees provide essential services to agriculture, natural ecosystems, and in the support of overall biodiversity. Bees are prime pollinators of roughly one-third of all crops worldwide; the recent decline in bee populations, therefore, has enormous social and financial consequences, direct and indirect, local and global. Since 2006 there have been significant losses of honey bees from **colony collapse disorder (CCD)**. Experts have considered a number of possible causes: pathogen infestation, beekeeping practices, pesticide exposure. The following excerpts are representative of the scientific race to find the causes of and cure for colony collapse disorder. Sources: xerces.org; hsph.harvard.edu; pollinatorstewardship.org; pmep.cce.cornell.edu.

A study by Lu and colleagues in 2012 suggested CCD is specifically related to the use of **neonicotinoids (neonics)**, which impair bees' neurologic functions, foraging ability, and reproduction. Numerous reports have subsequently confirmed that neonicotinoid insecticides harm multiple bee species. Neonics were first registered for use in the mid-1990s and have since been widely adopted for use on farm crops, ornamental landscape plants, and trees. Neonics are systemic chemicals; they are absorbed by the plant and transferred through the vascular system, so that the plant itself – its stems, leaves, flowers, pollen, and nectar – becomes toxic to insects that feed on it. To make matters worse, once metabolized by the plants neonics' breakdown products are equally or more toxic than the original compound.

These chemicals persist in the soil and in plants for a very long time (up to 6 years in woody plants), with potentially dire consequences: (1) untreated plants may absorb the chemical residues in the soil from the previous year; (2) these chemicals may harm pollinators even when the initial application is made outside the bloom period; and (3) can contaminate adjacent weeds and wildflowers.

Although a direct link between neonics and colony collapse disorder has not been proven, research suggests that neonics may make honey bees more susceptible to parasites and pathogens, including mites and the **intestinal parasite *Nosema***, which has been reported as one causative factor in CCD. A 2014 study from Harvard School of Public Health also finds that **colder temperatures**, in combination with neonicotinoids, may play a role in the severity of CCD. The authors conclude that neonicotinoids "are highly likely to be responsible for triggering CCD in honey bee hives that were healthy prior to the arrival of winter."

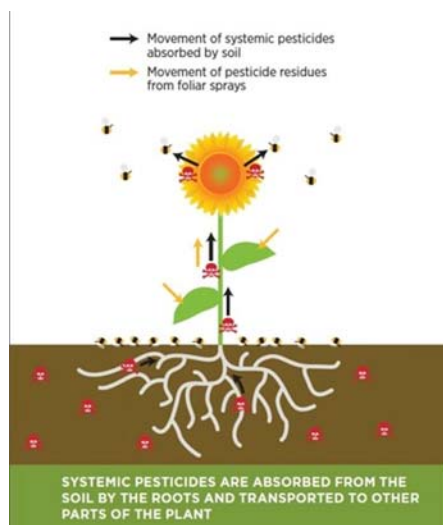
Another large body of research implicates synthetic pyrethroids used for mosquito control in the disappearance of pollinators. **Permethrin** is a broad spectrum insecticide used to kill a variety of insects through its paralyzing effect on the nervous system. It acts as a stomach poison when ingested or as a contact poison when the insect is directly exposed. It kills adults, eggs, and larvae and lasts up to 12 weeks after application. Permethrin is the most widely used mosquito adulticide in the U.S., used to treat

about 10 million acres out of the 32-39 million acres treated every year. It is applied as an ultra low volume (ULV) spray; the fine aerosol droplets stay aloft and kill adult mosquitoes on contact.

Permethrin is extremely toxic to bees and to fish, and should be kept out of all bodies of water. Aquatic ecosystems are particularly vulnerable to the effects of permethrin, which threatens the fragile balance between the quality and quantity of insects and other invertebrates that serve as fish foods. In urban and suburban areas, mosquito abatement practices are causing unnecessary bee kills even when applied as a ULV spray. Pesticides drift onto water and blooming plants, where the residual toxicity can last for weeks. "The next day when bees drink from a puddle or stream, or collect nectar from a bloom containing a mosquito control pesticide, the honey bee or native pollinator may die."



In a paper titled "Mosquitoes are Flying and the Bees are Dying," the Pollinator Stewardship Council berates the preferred practice to spray and fog our cities with pesticides and prescribes limited application only after the sun has set and in strict compliance with the EPA directive to avoid bodies of water and blooming crops or weeds. In addition, the council recommends "an account for the true value of the bee colony, its production potential, the value added to the crop through pollination, and the subsequent products from the pollinated crop. When managed pollinators have a total calculated economic value to the production of crops and the health of agriculture and the ecosystem, their importance as integral to the food supply will be fiscally recognized." We can only hope that our leaders are listening.



Southwest Nature Preserve Jan Miller

SOUTHWEST NATURE PRESERVE
I'm thinking about winter changes at SWNP: trees more sparse and seemingly fewer, barer, vulnerable soil, and braided, wandering footpaths. But whoops, that could be my track...there, on the lower right:



There have been several articles lately about how we use and manage our wild lands and the unintentional, but cumulative and adverse effects on wildlife:

“Design and Management Strategies to Avoid or Reduce Adverse Effects of Public Access on Wildlife”
<https://americantrails.org/resources/wildlife/baytraildesign.html>

“Everyone Loves Wild Animals in Their Backyard...Until They Don't”
<http://www.takepart.com/feature/2015/01/30/urban-wildlife-backyard-bear-mountain-lions-in-cities?cmpid=tpnews-2015-1-31-superbowlads>

“But My Dog Would Never Do That”
<https://lnt.org/blog/my-dog-would-never-do>

We humans do have our impacts, sometimes malicious, sometimes just uncaring, sometimes well-intentioned but short of the mark and occasionally living up to our calling to be the planet's stewards. SWNP and many other parks, preserves, refuges, etc. are fortunate to have well-intentioned “Friends” working to minimize human impacts on these habitats, while maximizing the public's enjoyment and understanding of natural areas. There's probably a park or preserve with a Friends group in your area, and they'd love to have you join them.

**Friends of Southwest Nature Preserve
monthly meeting
Tuesday, March 17
6:30 - 8:00 p.m.**

Southwest Branch Public Library*
3311 SW Green Oaks Blvd.

(west of Bowen Rd, east of Park Springs)

* This event is not sponsored by the Arlington Public Library.

Volunteer events

3/12 2nd Thursdays

3/28 4th Saturdays

9 am – noon (Sept. - May)

Projects focus on habitat restoration and trail management; current activities may include restoration seeding or planting, trash/debris pickup, invasive exotic plant removal, etc. Please wear sturdy shoes or boots and long pants. For more information and latest updates, see links below.

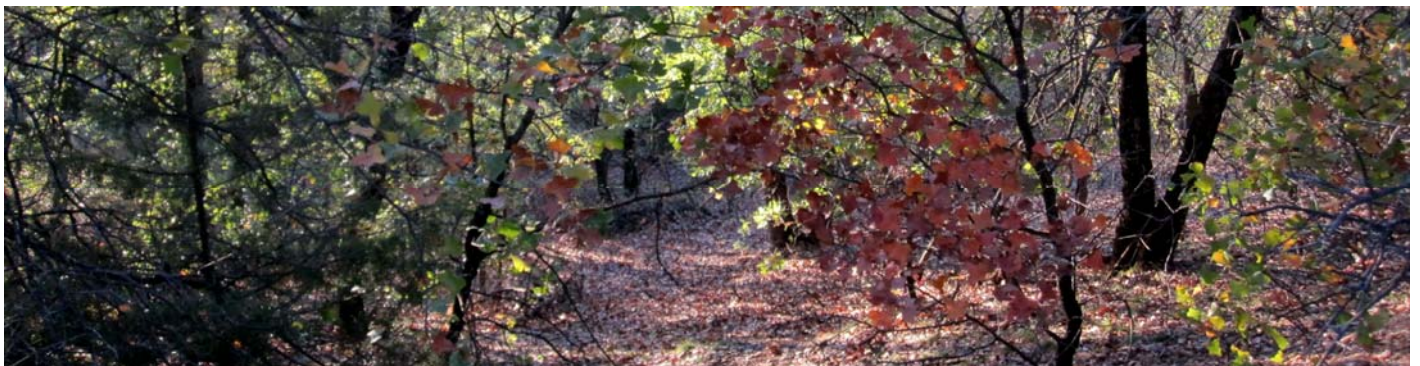
www.facebook.com/Friends-of-Southwest-Nature-Preserve Friends of SWNP Facebook

www.swnp.org Friends of SWNP website

info@swnp.org Friends of SWNP e-mail

www.facebook.com/SouthwestNaturePreserve APRD Facebook

Wanted!
Your best photos of Southwest Nature Preserve
Natural areas preferred — everything from landscapes to closeups
Please send them to 1darling@sbcglobal.net



ACC web site shines

Here's a very useful development you can find at the [ACC Web site](#): You probably remember last November's Julia Burgen symposium, *The Solar Option: Obstacles and Opportunities*, where four speakers gave us a remarkable quantity of useful information. So remarkable, in fact, that we really couldn't be expected to absorb it on the spot.

Now you can visit our Web site, scroll down a bit, and then click on each presenter's name to see slides from the program. Nice.



Drought update and classes Dustan Compton

Drought Update:

2014 marked the 5th consecutive year of below-average annual rainfall. You may have seen stories on other nearby Texas communities and their issues with water supply in the news as we are not the only ones feeling the effects. At this time, our area is designated as "exceptional drought" and is currently one of the hardest hit areas in the state. (<http://droughtmonitor.unl.edu/Home/StateDroughtMonitor.aspx?TX>) On June 1, 2013, we entered Stage 1 drought water restrictions, twice per week if needed, when Tarrant Regional Water District's water supply dropped to 75%. We have been in Stage 1 restrictions since then. Our current level of water supply sits at 63%. If our water supply drops to 60%, we will enter into Stage 2 of the drought plan and the response will be a limitation of once per week watering with automatic or hose-end sprinklers.

Throughout both stages of drought designation, you can always hand-water, use drip irrigation and soaker hoses any day and any time. If you haven't already, now is a great time to consider cutting back on some turf grass areas and expanding hardscape and/or landscape beds that require much less water and provide additional benefits. To help you in this effort, here are some relevant events and resources:

Free Spring Landscape Classes! Space is limited. To register, please call or email Dustan Compton at 817-459-6628 or dustan.compton@arlingtontx.gov

Lawn Care Maintenance

March 5, 2015, 6 - 8 pm, South Service Station - 1100 SW Green Oaks Blvd

Is the green in your lawn weeds or grass? Do you have brown circles in your yard? Proper lawn care maintenance is a key component to a healthy lawn. This program covers basic lawn maintenance practices and selecting the right turf grass to improve the health and longevity of your landscape. You will learn how to maintain your landscape using less water, fertilizer, and pesticides.

Sprinkler System Quick Fixes & System Operation

Mar 19, 2015, 6 - 8 pm, South Police Community Room - 1030 S.W. Green Oaks Blvd

Is your sprinkler system turning on the wrong day? Do you have a leak or broken head? Did your city give you a warning? Learn how to make very basic hands on repairs & maintenance to home automatic sprinkler systems, how your sprinkler system operates and its components as well as how to program and reprogram your sprinkler controller utilizing the best and most efficient ways to water your landscape like, the soak and cycle method and other water efficiency practices. A properly functioning sprinkler system saves you time, money, and water! This class will include a hands-on/DIY learning experience.

Drip Irrigation DIY

April 9, 2015, 6 - 8 pm, Southwest Library Community Room - 3311 S.W. Green Oaks Blvd.

Water slower, deeper and more efficiently with every drop. Convert your spray heads and watch your sprinkler system save you money from our hands-on drip conversion class. You will learn how to install drip irrigation tubing from your faucet or how to convert an existing zone to drip. Drip irrigation is the most efficient irrigation method and essential to sustainable landscapes. Drip irrigation for foundation watering will also be covered. This class will include a hands-on/DIY learning experience.

Texas SmartScape Plant Sale

Saturday, May 16, at Home Depot on Road to Six Flags

The Texas SmartScape Plant Sale is coming back to the Home Depot on Road to Six Flags on May 16. A regional partnership has been developed with many area cities, Home Depot and a few other independent plant nurseries to provide the Texas SmartScape recommended native and adaptive plants with specific, dedicated events. Please check out the website for a full list of events and start planning now! www.txsmartscape.com

I will provide another update in March about Fix a Leak Week activities and other possible learning opportunities.

ARLINGTON CONSERVATION COUNCIL MEMBERSHIP APPLICATION

Memberships are good for one year, renewable each January. Your dues go directly to our public education efforts.

Membership Information

Name _____	First-year member \$10.00	
Address _____	Individual \$15.00	New Member ☐
_____	Family \$25.00	
Phone _____	Supporting \$40.00	Renewing member ☐
E-mail _____	Sponsor \$100.00	
	Lifetime Individual \$250.00	
	Other \$ _____	

How did you hear about us? _____

Make checks payable to Arlington Conservation Council. Mail to ACC, Box 216, Arlington, TX 76004-0216. Contributions and dues are not tax-deductible. Note: If you cannot pay, please let any board member know. The only available newsletter format is electronic, and it can be obtained via e-mail and the ACC Web site.

President Danny Kocurek
Vice President Roy Miliner
Treasurer Marian Hiler

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ldarling@sbcglobal.net

Board Members
Frank Keeney, Webmaster
Grace Darling Jan Miller

THE POST OAK
Arlington Conservation Council
PO Box 216
Arlington, TX 76004-216

Don't Forget!

Wednesday, March 4
Fielder Museum
7:00 – 8:00 pm

Jim Schermbeck

***Early Results of Downwinder's
Ozone Modeling Project***