Rolling Plains Chapter NEWSLETTER

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The Rolling Plains Chapter partners with River Bend Nature Center and Wild Bird Rescue, Inc. in Wichita Falls; Lake Arrowhead State Park in Clay County; Copper Breaks State Park in Hardeman Count;, Whiteside Museum of Natural History in Seymour; and Comanche Springs Astronomy Campus in Crowell. Our Chapter covers Archer, Baylor, Clay, Foard, Hardeman, Jack, Montague, Wichita, Wilbarger, and Young Counties.

MAY 2: ***Rolling Plains Chapter Meeting - 7:00pm*** at MSU's Bolin Science Hall, room 209. If you would prefer to attend via Zoom, watch for the link to the meeting in your email. Either way, I hope you will join us.

AT ***The program:*** Ben and Ashlee Jacobi will be presenting a program on photography.

VT MAY 1-3: ***City Nature Challenge all day*** Help find as many species as possible within the ten county area that makes up the Rolling Plains Chapter's service area. More information will be available as we get closer to the event. There is nature all around us! By participating in the City Nature Challenge, not only do you learn more about your local nature, but you can also make your city a better place

I hope everyone has been busy making observations for the City Nature Challenge and I am looking forward to seeing what everyone has discovered. Don't forget that you can help identify postings through May 3. Our area is one of the least documented areas of Texas so this is a great opportunity to show folks what we've got!

The Training Class continues and two of our May classes will count for AT for members.

May 18: Paleontology, Dr Steven Rosscoe;

May 25: Texas Law, Ethics & Wildlife Conservation, Dillan Conley, TPWD Game Warden.

I hope you have been able to take advantage of the new classes and presenters offered this year. We will be having a "Trail Mixer" event on Friday, July 7th at RBNC to celebrate the end of the training so mark your calendars and save the date.

Speaking of opportunities, Melissa Rose, a 2023 Trainee and RBNC employee, has filled out the paperwork and gotten approval for volunteer work with the Kemp Wildlife Rehab group and she has cleared the way for others in our Chapter to volunteer with this group. Thank you Melissa!

The After School Fishing event is also kicking off in May and with Robert's retirement and some other issues, Wes is short handed. If you would like to help, the fishing festivities are Tuesdays and Thursdays, May 2, 4, 9 and 11 from 4:30 to 6:00 PM at the pond by the Northwest Field & Stream office on Southwest Parkway.

River Bend also needs a few hands as they host the Dallas Zoo on May 2 (9:30am - 12:45pm) and at BugFest on May 12 (5:45 - 9:00pm).

Watch your email and check the website calendar for more events and opportunities.

Our next meeting will be May 2nd at 7:00 PM. We will be in person at Bolin Science Hall, Room 209 at Midwestern State University and also on Zoom at the same time. (Watch for a link in your email.) Ben and Ashlee Jacobi will present our program and will be sharing their photography talents.

– for you and other species!

AT MAY 2-3: ***TMN Virtual Volunteer Fair***
The Texas Master Naturalist Program is planning to host its fifth Virtual Volunteer Fair this spring: with a series of 15-minute sessions May 2@9:00 am and May 3 @ 11:00 am

AT MAY 9: ***TMN Tuesday12:00-1:00pm***
TMNTuesdays webinar series are on the second Tuesday of the month through the 2023 year. This is the only webinar that you can count watching the recording.

AT MAY 11: ***Lights Out for Fireflies and Other Insects 12:00pm-1:00pm*** Insect populations around the world are declining rapidly. But why? While habitat loss, pesticide use, and climate change all have something to do with it, I show in this talk that light pollution is another important — but too often overlooked — bringer of the insect apocalypse.

AT MAY 12: ***Texas Stream Team Water Testing 9:00-11am***
Water testing will be conducted at Lake Wichita and the Wichita River. This event will be held the second Friday of each month, unless

Keep on posting those iNat observations... but please take a break and join us for our meeting! —Laura

Bottoms Up

Reprinted from the March issue of iWire

Beetles are great at surviving in extremely dry environments because they have evolved the ability to survive their entire lives without drinking liquid water. Instead, they absorb water through their butt! Well, not exactly. They are able to open their rectum and take up water through moisture in the air, which is converted into fluid and absorbed into the body. They are also extremely efficient at extracting water from their food, utilizing their rectal complex and kidneys to extract moisture from frass (insect feces) before it is excreted. Until recently, however, no one was sure what mechanisms mediated these water-extraction functions.

An investigation has revealed the molecular mechanisms that allows beetles and most lepidoptera larvae to do this amazing feat of physiology. The research was performed on the red flour beetle (Tribolium castaneum), a global pest of stored food, making it a model organism for this study. Using genetic analysis and electrophysiological studies, researchers were able to isolate the gene responsible for water extraction in the rectal complex. This gene is called NHA1.

NHA1 localizes exclusively to specialized leptophragmata cells. These cells are situated like windows between the beetle's kidneys and the insect circulatory system. They enable hemolymph (or insect blood) to tubule movement of potassium chloride into the kidneys so they are able to absorb water from either frass or moist air through the rectal complex. This moisture is then recycled back into the body. When NHA1 was genetic depleted, excretory water loss was increased and body desiccation increased, suggesting absorption of water through the environment decreased. The findings of this study suggest that NHA1 expression is essential for maintaining the systematic water balance in beetles.

Researchers hope with this new information, 'eco-friendly' pesticides can be established to turn off or alter the water balance feature of specific invasive and agricultural pests, alowing for more targeted poisons.

Butterfly Weed (Asclepias tuberosa)

Butterfly weeds are medium-sized plants that get bushier as they grow older. They form clumps of upright stalks with narrow pointed leaves topped by 2 - 4 inch-diameter clusters of orange or yellow flowers. It blooms from April to September. This common urban plant grows to a height of 1 1/2 to 2 feet.

Life History

As a long lived perennial, butterfly weed may take as long as 4 years before it reaches full size. It reproduces by seeds or root division.

noted otherwise.

PO MAY 13: ***Monthly Bird Outing 8:00-10am*** Join Penny Miller, other members and guests at Lake Arrowhead State Park for a bird outing. Look for and identify birds found at the park. This is a leisurely hike on level ground (handicap accessible). Binoculars helpful, but not required.

PO MAY 20: ***Monthly Hike – Wichita Bluff Trail 10:00am-12:pm*** Join members as we explore the Permian Geology along the Wichita Bluff Trail.

PO JUNE 3: ***Mark Howell Memorial Fishing Rodeo 9:00am-3:00pm*** Named after our first chapter advisor, this is a fishing competition focused on getting kids involved in fishing. Volunteers are needed to help enter the participants, record the fish lengths and other activities. You do not need to be present the whole time. Any assistance will be appreciated.

Butterfly weed stores food and water in a large taproot. This allows it to survive during the long dry Texas summers. Because it is adapted to dry conditions butterfly weed is more likely to die from too much water than not enough. Butterfly weed is occasionally used by Monarch butterflies as a caterpillar food plant but is not preferred because its sap is not poisonous enough to prevent other animals from eating them.

Butterfly weed really lives up to its name. It attracts a wide range of butterflies to the abundant nectar that it produces. Butterfly weed belongs to the milkweed family. Unlike other members of its group it doesn't ooze a sticky white sap if damaged.

Habitat

Butterfly weed grows in sunny locations on well-drained sand, loam, clay or limestone soils.

Distribution

Butterfly weed is found throughout the state of Texas but is more common in the eastern two-thirds. This species is widespread in the eastern half of the U.S.

Other

Pioneers and native Americans used boiled butterfly weed roots to treat diarrhea, asthma and other respiratory illnesses. The down from milkweed seeds was spun to make candlewicks. The young seed pods were boiled with several changes of water and eaten like okra.

Great Egrets are Flirty Birds

The feathers of Great Egrets are pure white at all seasons, and the birds wear long, flowing plumes for much of the year. For these egrets, courtship colors are expressed in their faces: The bare skin between their eyes and bill turns bright lime-green at the height of breeding season. Courtship displays between members of a pair are usually performed at or near the nest. These may include odd stretching postures, bowing, exaggerated preening, fluffing out the feathers of the neck and crest, and many more. At close range, the birds may also engage in a gentle mock dueling with their bills, or crossing their necks, like the individuals in this portrait.

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