



TEXAS TECH UNIVERSITY Climate Science Center™

November Newsletter 2015

The Key to Conservation May Lie in our Language

The West Texas community has not been known for prioritizing water planning and conservation. Thus, the community cannot ensure that they can survive future droughts. West Texas experiences droughts that end with wet periods, but these cycles are becoming more severe with longer droughts and heavier, sporadic rainfall. Ken Baake quotes the song, "Dry Land Farm," written by Lubbock native, Butch Hancock. The song tells of a West Texas farmer that witnesses rainfall on all of his neighbors' land, but none ever reaches his. Baake presents several points that West Texans must understand if water conservation is to become a priority for the region. First, water sources such as the Ogallala Aquifer were not easily regulated in the past. Such is the mysterious nature of aquifers, these bodies of water would disappear and reappear and many see them as being unlimited resources. Second, the "rule of capture" law allows the use and misuse of water on a landowner's property. With this law, landowners have the right to do whatever they wish with the water on their property and excessive use of water supply is a hard habit to break in times of drought. Third, opposing arguments surrounding conserving water only lead to slowing down action. Fourth, landowners often see any outside regulation as being a bad thing and such will harm their land or lifestyle. Finally, policymakers have been slow to accept the cultural characteristics of people living in West Texas. Many in West Texas have based their lives on the ideal that faith and hard work will be rewarded. In order to overcome these impediments, West Texans must address these perceptions of water and create a plan to adequately conserve resources. West Texans must also see that outside parties can keep conservation in mind.

M. Alexander Pearl



Professor Pearl earned his B.A. in Philosophy from the University of Oklahoma. He then graduated from the University of California-Berkeley School of Law. Following law school, he clerked for the Honorable William J. Holloway, Jr. of the United States Court of Appeals for the Tenth Circuit. Upon completing his clerkship, he worked as a litigation associate with Kilpatrick Townsend in Washington, D.C. where he exclusively represented individual Indians and Indian tribes on a variety of matters. Pearl is an enrolled citizen of the Chickasaw Nation of Oklahoma. Pearl joined the Texas Tech School of Law as an Assistant Professor in 2014 and is the Associate Director of the Center for Water Law and Policy. He teaches Water Law, Property, and Advanced Water Law. His current research focusses on addressing groundwater in Texas and the extent of property rights in the pumping of water in over-drafted



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aquifers. Pearl understands climate conditions are exacerbating and his research is looking to address how Texas can enforce monitoring and regulation of water resources.



- Katharine Hayhoe will star in a PBS digital series titled, "Global Weirding: Climate, Politics, and Climate Change." In this series Katharine will explore the arguments, science, politics, religion, culture, and psychology at the intersection of politics and climate change. The film production began November 12th, stay tuned to hear more about this fascinating web series.
- CSC Seminars will continue December 1st at noon in the Experimental Sciences Building. The speakers will be Nathaniel Wright from the Department of Political Sciences, Gad Perry from Natural Resource Management, and Bruce Clarke from the Department of English.
- Looking for a summer internship this summer? Do your internship with the South Central Climate Science Center! The Internship will be from May 19th - June 7th. Students will do research in regards to climate change at several different universities - beginning their journey in Baton Rouge, LA and ending in Lubbock, TX. Keep your eye out for more information!

The Climate Report

The climate report came out with a study titled, "A Field Guide to a Warmer Future." This report discusses how birds will be affected by climate change using climate-science observations and climate models to predict how birds in the U.S. and Canada will react. 314 out of 588 North American bird species may lose more than half of their current climatic range by 2080. 126 out of the 314 species are classified as climate endangered. Birds will have to migrate to stay alive but how many times can they migrate before they are being affected everywhere?



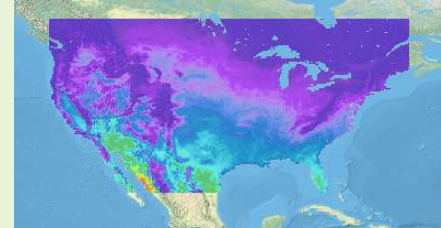
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Other News

- The CSC website just relaunched, make sure to go check it out and see published faculty articles, CSC events, resources, and information.
- If you missed this month's Science by the Glass with Dr. Jeff Lee presenting on, "Are We Headed For Another Dust Bowl?" [Click Here](#) and you can watch it on our CSC YouTube channel.
- Clay and Sarah Pope from the USDA Southern Plains Climate Hub will be the Climate Science Center's Research Fellows. Clay and Sarah will work with the CSC to improve and adapt to farming techniques around Lubbock that will help when climate conditions are being exacerbated. Steve Moon will also be one of our research fellows. He works for LP&L as a promotion coordinator and he will help the CSC learn more about energy efficiency and what Lubbock can do.

CSC Featured Data Set

The high-resolution climate projections generated by the TTU CSC are now online as part of the USGS GeoData Portal. They can be used to make interactive climate maps of a host of variables (shown: days per year with maximum temperatures above 90F). <http://goo.gl/OF49Ep>



November Seminar Speakers

Sarah Fritts
"Do Wildlife Matter?"



Sarah Fritts explained that those who study wildlife hold value to it because of ecosystem services, hunting and fishing, and intrinsic factors. The larger question is if the general public thinks that wildlife holds importance and if not, how to instill an idea of value for

Brian Screck
"Talking about Climate Change"



Brian Schrek provided commentary on a study conducted over the public knowledge and discourse on climate change. Generally, the public knows that climate change is an important issue, but it is split on how to act on the subject. Those who think

Andy Wilkinson
"Promises of Rain"



Andy Wilkinson played a song describing his childhood on the Llano Estacado and the hardships his family faced on their farm. Throughout the song, Wilkinson drew importance that living in West Texas always comes with "Promises of Rain", but these promises are now always

wildlife. Fritts explained several ways that wildlife research can benefit society such as breakthroughs in efficiency and public health.

[Watch Sarah's Seminar](#)

they know the most about the subject engage with the public whether they are sharing valid information or not.

[Watch Brian's Seminar](#)

fulfilled. Wilkinson also shared a poem about the use and misuse of the Ogallala aquifer.

[Watch Andy's Seminar](#)



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