Climate Change Discussed on HBO’s Vice

Texas Tech Climate Science Center members featured on HBO Docu-Series Vice

Dr. Katharine Hayhoe and Dr. Robert Forbis were featured in a recent episode of HBO’s docuseries Vice entitled “The Resource Curse and Deliver Us from Drought.” The episode first investigates the struggles of residents of Papua New Guinea coping with the presence of Exxon Mobile. Texas is then featured for the debilitated oil and gas regulations despite tremendous drought. Dr. Hayhoe explained that there is “No doubt what so ever that humans produce carbon dioxide” and further states that “drought situations put tremendous stress on farmers and ranchers” which spoke to the closing of the Cargill meat processing plant in nearby Plainview. Vice correspondent Thomas Morton noted that the beef industry is buckling under the drought but the oil and gas industry is thriving. In addition, Dr. Forbis discussed the changing conditions in West Texas which was once a land for cattle running and but presently common transport for oil and gas services. He also expressed that an underlying condition leading to these outcomes is the strong role of lobbying in policy development.

You can watch a briefing of the episode with the following link: http://goo.gl/8GYWxD

CSC Featured Dataset

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 90°F) http://goo.gl/OF49Ep

May Climate Science Seminar Speakers

Dr. Chuck West
CASNR
Texas Tech University
“Can High Plains Crop Producers Stretch the Supply of Groundwater For Irrigation Use?”

Dr. West is one of the leaders of the Texas Alliance for Water Conservation, and works through this organization to research the best agricultural water-use practices to maintain water levels within the Ogallala aquifer. The project originally included Hale and Floyd counties, but has now been expanded to a total of six counties. The primary objectives of the project include reduction of total water use, enhanced profitability, identification of effective crop and irrigation systems, and impacts on producer decision-making. There is a major outreach component associated with TAWC to communicated data to the public. More information and resources can be found at tawcsolutions.org.

Dr. Kerry Griffis-Kyle
Natural Resource Management
Texas Tech University
“Desert Amphibians and Climate Change: Victims of Good Intentions?”

Dr. Griffis-Kyle’s research is focused on the effects of climate change on desert amphibians. As natural pools of water used for the breeding of amphibians have decreased, there has been a need to provide artificial catchments to allow for the continued survival of species. These catchments, however, have become a breeding ground for dangerous diseases that weren’t before present in naturally-occurring water sources. There has been a highly concerning spike in nitrogen levels within these catchments and large stresses placed on amphibians with increases in temperature. Amphibians are ectotherms by nature and their immune systems become more susceptible to these diseases as they are suppressed with increases in temperature.

Dr. Jennifer Vanos
Geosciences
Texas Tech University
“Sensing the Invisible: Viewing Microclimates From a New Perspective”

Dr. Vanos’ research focuses on biometeorology and microclimates, which are climates on the order of centimeters of meters. Surface temperature is a function of how much terrestrial radiation is emitted from the Earth’s surface. This amount is affected by the surface materials that the incoming solar radiation impacted. For instance, asphalt will hold more heat than concrete. To mitigate the negative impacts of increases in temperature and the urban heat island effect, we must consider the materials used for urbanization as well as primary wind directions. Vapor pressure and air pollution are also important factors, which must be considered to mitigate negative health effects as the climate continues to change.

Other highlights from this month:

• Dr. Hayhoe featured on KXWT speaking about climate change and West Texas and the Third National Climate Assessment earlier this month. Listen here: http://goo.gl/DoQV0m
• A straight-forward summary of the recently released National Climate Assessment can be found here: http://goo.gl/RrQn5l

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