TEXAN 🍫 NATURE

July 18, 2018

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The mission of Texan by Nature is to spur Texan-led conservation that produces tangible benefits for people, prosperity, and natural resources.

Committee on Culture, Recreation & Tourism/House Agriculture & Livestock Committee - Interim Charge #3

Study the effects of declining migratory species, such as the monarch butterfly, as well as native and domesticated bee populations on agricultural production and its economic impact on the state. Identify possible causes of the population changes and monitor national trends. Make recommendations on how to improve and promote monarch butterfly and bee populations and habitats in the state.

Texan by Nature is a non-profit organization founded by former First Lady Laura Bush. We bring business and conservation together for positive impact for our natural resources, people, and economy.

In June 2017, we hosted the South-Central Monarch Symposium--as part of a project funded by the National Fish and Wildlife Foundation. This working symposium brought together 200 conservationists, landowners, and researchers throughout Texas and Oklahoma representing over 80 organizations to discuss the status of efforts underway for recovery of the monarch. Our purpose directly addressed a large part of Charge #3.

As we've journeyed through this project, the depth and breadth of work being done throughout the state has been inspiring, yet the realization of the amount of work still to be done is daunting. Through our collaboration with 26 partner agencies and synthesis of information collected throughout our project, this is what we learned:

- 1. Private lands are key to recovery efforts
- 2. Industry right-of-ways can create corridors of habitat that align with the migratory path of the monarch, and
- 3. Public and private partnerships are needed to create AND implement practical solutions

Over 95% of Texas lands are privately owned. Effective monarch and native pollinator conservation will require private landowner engagement and involvement. These lands will play a significant role in creating, conserving, and maintaining native pollinator habitat. Thousands of landowners on millions of acres are already engaged in wildlife management. They are key in supporting monarch conservation efforts.

Industry right-of-ways that include oil, gas, utility, rail, and roads create a network of corridors and patches along the migration route through Texas spanning hundreds of miles and thousands of acres. Restoring these lands to native pollinator friendly rangeland would produce hundreds of miles of connective habitat needed by all pollinators.

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The need for ecologically specific seed mixes across Texas is critical for the viability of habitat restoration. Issues surrounding supply and demand of these mixes remain. Public/private partnerships will create viable solutions to issues like these, sustaining habitat, and building productive relationships.

We need your help to work together with partners to:

- 1. Create economically viable solutions for landowners and private industry to restore and maintain native pollinator friendly rangeland in Texas.
- 2. Foster public and private partnerships to increase supply of ecoregion specific seed mix.

You're hearing a lot about monarchs these days. They are indeed a beautiful, iconic American species that unifies our rural and urban populations. But the fact is--they are much more than that. They're a pollinator species whose decline is a warning signal for the overall health of habitat for other pollinators. Insect-pollinated agricultural commodities generate significant income for agricultural producers. In Texas, these commodities account for a large proportion of the \$7 billion produced annually. Working together to restore native habitat across Texas will not only help recover pollinator species that are a critical component of agriculture in our state, but will enhance our water supply, and improve our quality of life. It is in our best interest to conserve the natural resources that provide a foundation for our prosperity.

Project Facilitator: Amy G. Snelgrove, Texan by Nature Project Development: Dr. Matt Wagner, Texan by Nature

Supplemental Information:

Twelve "cotton landscapes" in South Texas benefited from diverse pollinator populations estimated at \$108 per acre with a regional gain of over \$1.1 M. (Cusser, Neff and Jha, 2016) Note: Extrapolated across all the cotton acreage in Texas (estimated at 5.2 M acres) would be \$561,600,000.

Pollinators are essential to the production of an estimated one-third of the human diet and to the reproduction of at least 80 percent of flowering plants. Insect-pollinated agricultural commodities result in significant income for agricultural producers and account for over \$20 billion in annual U.S. agricultural production (Letter from USDA, August 1, 2013).