2023
Winter Prairie Project Newsletter

Rangelands NY Times Piece!

Eastern Redcedar, the Green Glacier of the Great Plains

“The Great Plains biome is dying,” Dr. Twidwell said. “Losing grasslands at this scale is akin to losing tropical rainforests or coral reefs.”

“The good news is that prescribed fire, where done repeatedly, has proved to effectively halt the Green Glacier’s spread.” - NY Times

“A ‘Green Glacier’ is Dismantling the Great Plains"

This recent New York Times article features Dr. Dirac Twidwell, professor in the Department of Agronomy and Horticulture at the University of Nebraska. He is a Principal Investigator leading research on the Prairie Project and also a Scientific Advisor for the USDA Natural Resources Conservation Service. Dr. Twidwell’s work with the Eastern Redcedar Science Literacy Project was highlighted in the Times

Kudos!

Congratulations Deann Burson and **Dr. Morgan Treadwell** for winning the 2023 Popular Writing award at **Texas Section SRM** for Plant Response to Seasonal Fire in the Edwards Plateau, High Plains and Rolling Plains.

Check out the publication here!

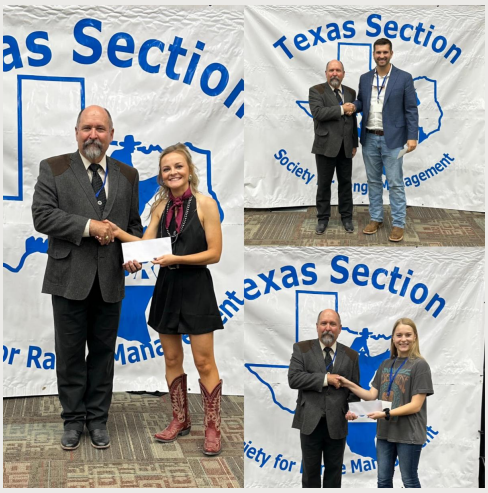
article along with some quotes pertaining to the decreasing Great Plains biome. For more information on Dr. Twidwell and his work click here!

Analysis of the Cost and Cost Components of Conducting Prescribed Fires in the Great Plains

The costs of prescribed burning is one of the main factors when it comes to the adoption and regular use of prescribed burning.

This recently published study from The Society of Range Management took an Internet based survey of prescribed burn professionals in the Great Plains to determine the average cost of prescribed burn per acre, which turned out to be $11.37. There were seven significant variables that emerged including, number of burns and acreage, firebreak type, and

Congratulations to Chase Brooke on winning the 2023 County Agent Grass Roots Award at **Texas Section SRM**!



Congratulations Erika Sullivan for taking home 2nd in the Graduate Poster Competition for the Don Pendleton Collegiate Awards at **Texas Section SRM**!

Congratulations also are in order for Erika Sullivan who received her M.S. Degree in Range Science from the Rangeland, Wildlife, and Fisheries Management Department at Texas A&M University. Erika

fuel characteristics.

The results of this study will be able to help landowners, environmental managers, prescribed burn professionals better understand and implement prescribed burns as part of their land management plans.

For more information and to read the full study, click **here!**

Prairie Project Educator Updates!

The Prairie Project had great representation at the Texas Section Society for Range Management Annual Meeting in October.

Pictured left to right: Dr. Humberto Perotto (faculty participant), Sakina Dixon (education project manager), Chase Brooke (Extension participant), Erika Sullivan (graduate student assistant), Dr. Ben Wu (co-PI & research faculty), and Matthew Rector (research associate).

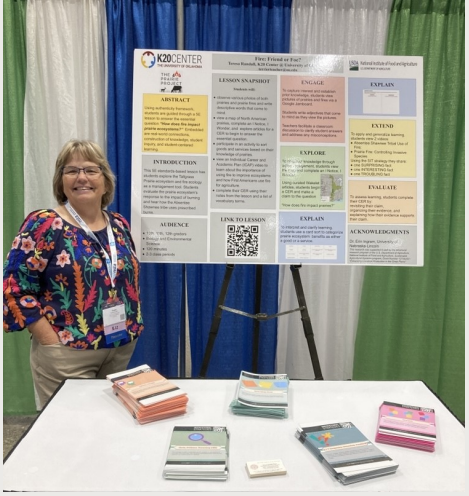
Not pictured: Dr. Morgan Treadwell (co-PI & research and Extension faculty) and Dr. Bill Fox (research and Extension faculty).

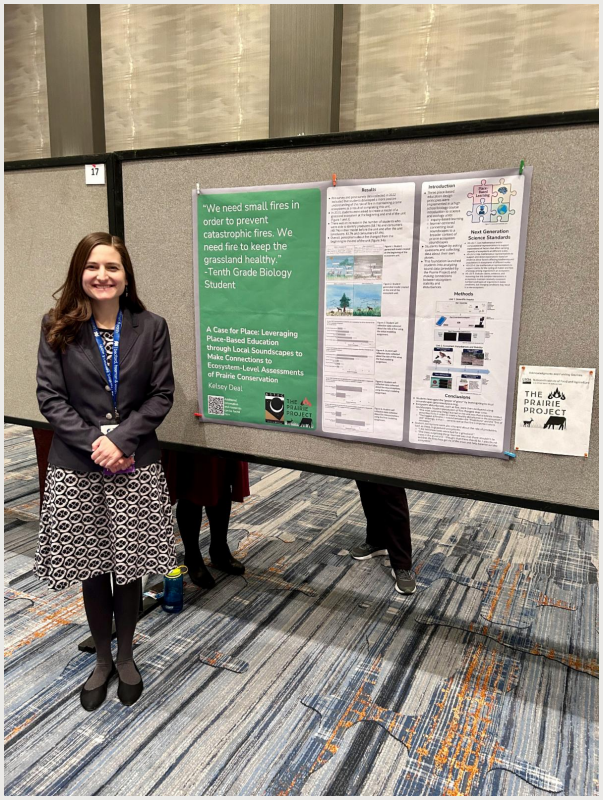
who is from Katy, Texas, earned her Bachelors of Science from Texas A&M University in Ecological Restoration where she was secretary of the Ecological Restoration Club.

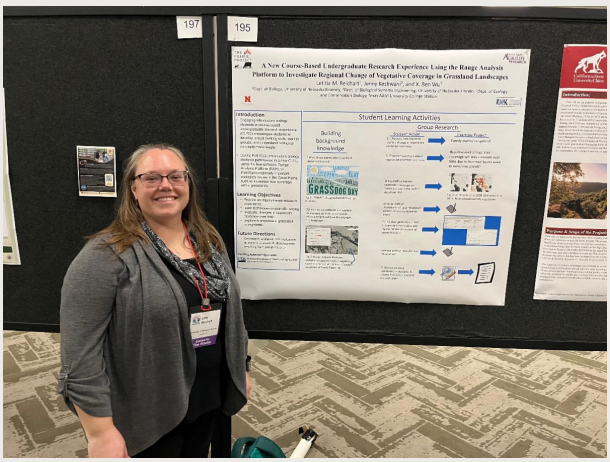
Over the last two years, Erika has worked with Texas A&M AgriLife Extension as part of The Prairie Project. Her main research interests included prescribed fire, multi-species grazing, brush management, learning assessments, and working with youth! Erika has also hosted multiple workshops, ranch tours, and educational training for landowners, Texas Parks and Wildlife, NRCS, County Extension Agents, and Agricultural Educators to showcase the Rangeland Analysis Platform.

Erika has recently accepted a position at Corteva Agriscience as a Range Agronomist, where she will continue to teach and work with landowners, agencies, and educators on the latest science and management techniques in rangeland management.

Once again, Congratulations Erika! We are so proud of you and truly grateful for your devotion, determination, and hard work the last two years! WELL DONE!







Three members of our third educator cohort presented their instructional materials and assessment data at national conferences in October and November.

Dr. Teresa Randall (pictured above) presented her lesson "Fire Ecology As A Management Tool For A Tallgrass Prairie Ecosystem" at the National Science Teachers Association's conference in Kansas City, MO.

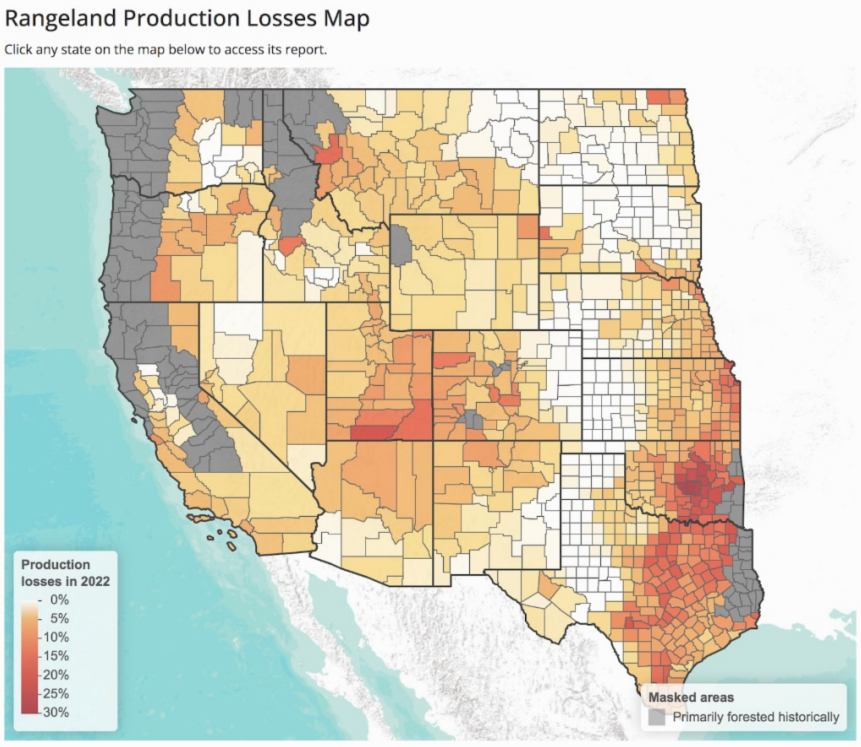
Kelsey Deal shared her lesson and student data from her project on "Leveraging local soundscapes and place-based education to make connections to ecosystem-level applications" at the National Association of Biology Teachers Professional Development Conference in Baltimore, MD.

Dr. Letitia Reichart showcased her new Course-Based Undergraduate Research Experience (CURE) at the Wildlife Society's Annual Conference in Louisville, KY. Her CURE focused on using the USDA-ARS Range Analysis Platform to investigate regional change of vegetative

coverage in grassland landscapes.

Rangeland Production Lost to Tree Encroachment

Production lost to tree encroachment in 2022	Cumulative production lost to tree encroachment (1990-2022)
13,562,136 tons	370,441,789 tons

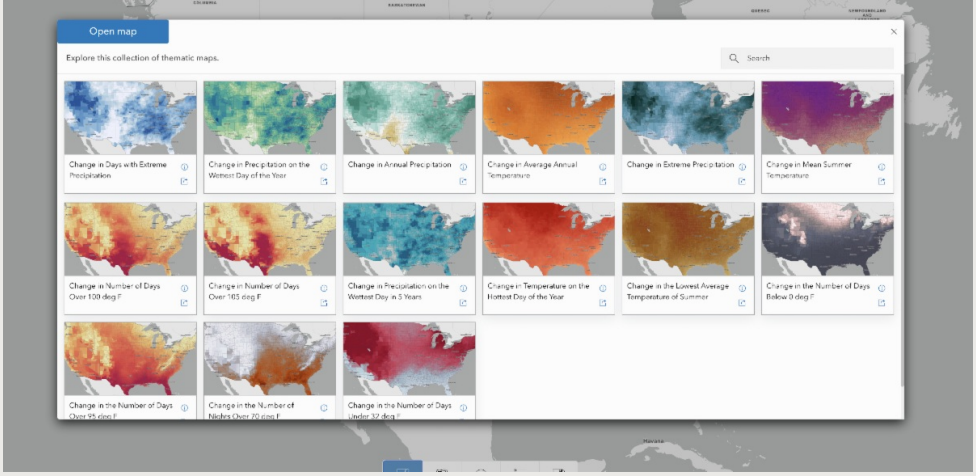


The map depicts rangeland production losses for the year 2022 that resulted from increases in tree cover since 1990. The colors show percent losses relative to production that would have been acheived without increases in tree cover. Counties estimated to have had significant amounts of forest prior to Euro-American settlement are masked in grey to focus attention on historical grasslands and shrublands.

WLFW Researchers at the University of Montana have recently updated the "Yield Gap" numbers through 2022. Rangelands in the West in 2022 lost more than $200 million dollars in forage value due to encroaching woody species.

When the trees move in, the native vegetation that wildlife and livestock producers rely on get displaced. To check out the map and your specific state, click here!

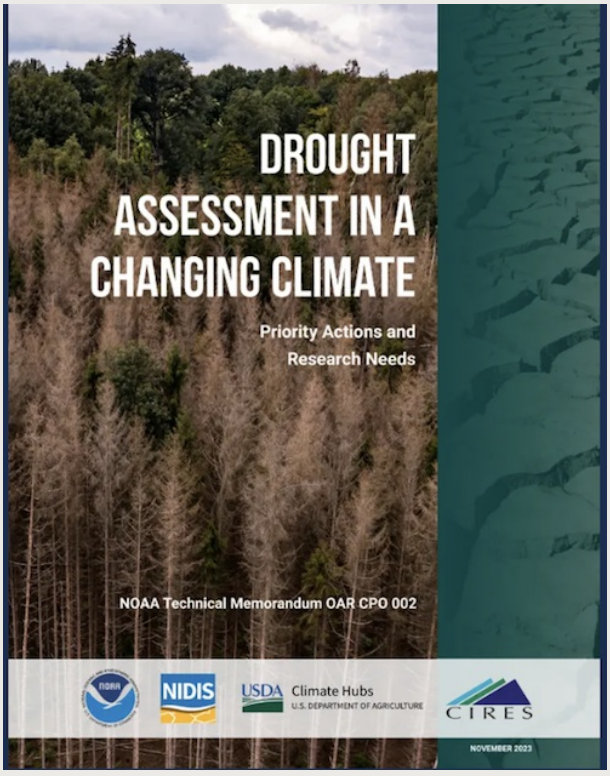
Climate Change in the United States: Latest Assessment



The U.S. Global Change Research Program has released the[Fifth National Climate Assessment](). This report consists of 32 chapters and the[NCA Atlas](), which is an interactive tool used to explore localized climate projections, seen in the photo above.

[Chapter 26](), includes the Southern Great Plains Region. These chapters cover climate physical science, national topics, regional reports, and responses to current and future climate trends.

Assessing Drought in a Changing Climate: A technical workshop report



A technical workshop was held back at the end of February with scientists and practicioners from federal, tribal, state, and local agencies as well as academic institutions discussing the current methods for assessing drought and how these methods do not consider climate change.

Some of the questions answered included:
What research is needed to produce drought indicators that account for climate change? And what resources are available to support their development and integration into the current suite of indicators?

Check out the full report**here!**

Opportunities for Involvement!

[Climate-Smart Practices for Sustaining Great Plains Rangelands]

Two cohorts of Educators and Natural Resource Professionals are being recruited as agents of change.

Participants will develop, implement, and disseminate high-impact education and outreach resources and programming.

Applications are being accepted until January 22, 2024! [Apply today!]

Upcoming Events

The Great Plains Fire Summit Meeting will be held August 13-15, 2024 in Canyon, Texas.

Registration will be coming soon!

Stay up to date with all Prairie Project news by following us on social!

Website - The Prairie Project

The Prairie Project Website

Connect with us

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