Dannele Peck
Director
Ag Economics

Windy Kelley
Coordinator
Extension

Matt Reeves
Co-Lead, FS
Rangeland Modeling

Rafael Guerrero
Co-Lead, NRCS
Director, Tech Center

Justin Derner
Research Leader, ARS
Rangeland Science

Selected Accomplishments in FY21 Q1 (Oct – Dec 2020)

Science Synthesis & Tool Development

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Seasonal grassland productivity forecast for the U.S. Great Plains using Grass-Cast

Melannie D. Hartman, William J. Parton, Justin D. Derner, Darin K. Schulte, William K. Smith, Dannele E. Peck, Ken A. Day, Stephen J. Del Grosso, Susan Lutz, Brian A. Fuchs, Maosi Chen, Wei Gao ... See fewer authors

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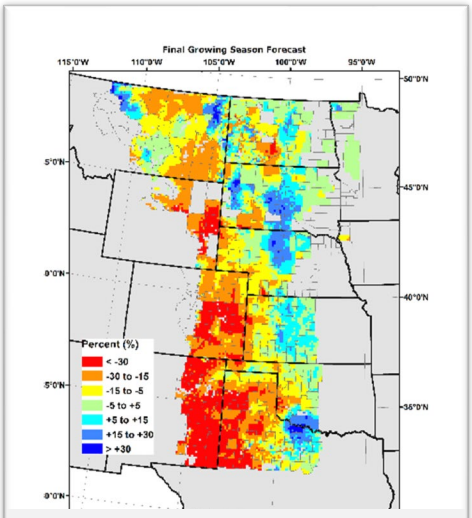
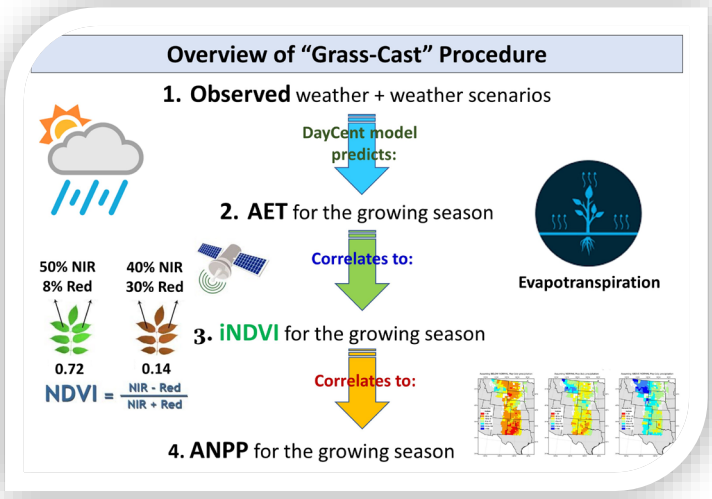


Grass-Cast map showing final production estimates for 2020.

Every spring, ranchers face the same difficult challenge—trying to anticipate how much grass might grow for livestock to graze during the upcoming season. Beginning in 2017, an innovative **Grassland Productivity Forecast** known as "**Grass-Cast**" has helped producers in the Great Plains and Southwest reduce this economically important source of uncertainty.



Now, the **science and data underlying Grass-Cast** for the Northern Plains are described in a **new article** in the peer-reviewed journal, **ECOSPHERE**.

The open-access article is freely available at **https://doi.org/10.1002/ecs2.3280**.

A team of scientists from two countries, three universities, and the USDA Agricultural Research Service, including the Northern Plains Climate Hub, wrote the article.

Outreach & Engagement

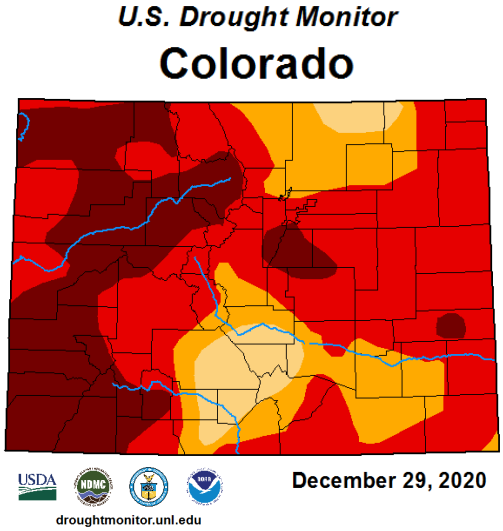
More and more **agricultural producers** are adopting **innovative management practices** to bolster their operations' **resilience to weather and climate risks**.

The Northern Plains Climate Hub, in partnership with Extension and agricultural producers in the region, have developed an online, interactive StoryMap, **"Learning From Your Neighbor: Climate Resiliency in Agriculture."**

Through this immersive website, **producers share their stories** about the **benefits, challenges, and valuable lessons learned** while adopting **weather-resilient** and **climate-smart** practices!

The state of **Colorado** experienced widespread drought during 2020, with the U.S. Drought Monitor showing **100% of the state** experiencing abnormally dry to exceptional **drought (D0-D4)** during early August and continuing into 2021.

Roughly **77% of the state** was experiencing **extreme or exceptional drought (D3-D4)** in mid-October, when the state's **second largest wildfire** on record, the East Troublesome Fire, began.



With this backdrop of Colorado's intense wildfires and on-going drought, the **Colorado Association of Conservation Districts** invited the Northern Plains Climate Hub to give a presentation on "**Agricultural Climate Resilience**" during their 2020 Virtual Annual Meeting. https://www.coloradoacd.org/annual-meeting.html

Contact: dannele.peck@usda.gov or 970-744-9043