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## Tuning in to drought chatter: Detecting deviation from expectation

**Kelly Helm Smith**

University of Nebraska-Lincoln, National Drought Mitigation Center, Lincoln, Nebraska, United States of America  
([ksmith2@unl.edu](mailto:ksmith2@unl.edu))

Drought has a strong subjective component, incorporating an expectation about how much water there “should” be. Impacts of drought are the downstream effects of a phenomenon that is difficult to bound in space and time, but that propagates through sectors and ecosystems. Data on drought losses with a monetary value, such as commodity crops or energy production, are most readily available. Data on changes to ecosystems and other less coordinated economic activities are harder to find. The Drought Impacts Toolkit ([droughtimpacts.unl.edu](http://droughtimpacts.unl.edu)) curates many sources of drought-impact information. Tools hosted on the site focus on gathering and mapping what people are saying about drought via news stories, social media, crowdsourcing and citizen science. These map layers are independently informative and collectively contribute to a convergence of evidence approach to assessing drought impacts. Each represents a channel of information that captures different sets of motivations and describes drought’s effects at different temporal and spatial resolutions. Quantifying the volume of information on each channel over time -- “chatter” -- provides insight into rising and falling levels of awareness or concern about drought. Analysis of and familiarity with the relationships between what is being said on different channels and at what rates, and how they do and don’t coincide with physical phenomena, is a useful diagnostic approach. It may provide early warning of emerging drought or drought impacts, insights into how people experience the effects of drought from one place to another, underlying vulnerabilities, and potential solutions.