



# THE ATMOSPHERIC RESERVOIR

*Examining the Atmosphere and Atmospheric Resource Management*

## Websites Offer Better Climate & Drought Tools

By Mark D. Schneider

Improved drought monitoring tools are now available online for North Dakota producers. Two websites, the Greenleaf Project, <http://greenleaf.unl.edu>, and the National Integrated Drought Information System (NIDIS), <http://www.drought.gov>, have become hubs for gathering together climate and drought resources that farmers, ranchers, and producers of all types can use to make the smartest, most informed operational decisions possible.

The GreenLeaf Project began in 2005, under a partnership between the USDA Risk Management Agency (RMA), the National Drought Mitigation Center (NDMC) and the University of Nebraska-Lincoln Department of Computer Science and Engineering. The website is engineered so that the amateur and the professional can both use it beneficially. The homepage is search-engine based. Think of it as a "Google" for drought and climate information. To quote from the GreenLeaf Project, "Our advanced search capabilities allow you to pull up a snapshot of climate, soil, and drought conditions as easily as you look up a name in the phonebook."

In addition, the website provides access to over one billion climate records at no cost to the user. These climate records can be used to show trends in temperature, precipitation, and average growing season duration for planning purposes. Never before



has so much climate information been so readily available to the average internet user.

The National Integrated Drought Information System is an ongoing project much like the GreenLeaf Project that has its origins with the Western Governors' Association. NIDIS provides collaboration between government agencies, pulling together their drought resources. On the NIDIS website, one will find current drought information, forecasts, impacts, planning, education, and research menus. Useful products that can be accessed from the main website are the U.S. Drought Monitor, U.S. Seasonal Drought Outlook, and the Drought Impact Reporter.

The U.S. Drought Monitor updates weekly and provides drought intensity on a D0-D4 scale. D0 delineates abnormally dry conditions, while D1 indicates moderate drought, D2 severe drought, D3 extreme

drought, and D4 exceptional drought conditions. Also noted are drought impact types, which include agricultural and hydrological impacts. Agricultural impacts are shorter-lived impacts that trend more towards seasonal effects, whereas hydrological impacts are longer-lived and usually have wider ranging effects on water supplies.

The U.S. Seasonal Drought Outlook forecasts drought tendencies for the upcoming three-month period. Improvement, persistence, development, and ongoing drought are all used in order to provide a planning resource to producers and agencies.

Lastly, the Drought Impact Reporter can be used to reference drought impacts that have been reported through the media or by an online user. This product will become especially useful once the NIDIS project is fully implemented.

With the increasingly competitive nature of the world markets today, North Dakota's producers need all the help and information they can get to effectively plan and compete. Tools such as the ones offered by the GreenLeaf Project and NIDIS provide a "two stop shop" for climate and drought resources.

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