

THE ATMOSPHERIC RESERVOIR

Examining the Atmosphere and Atmospheric Resource Management

ARBCON introduces internet reporting

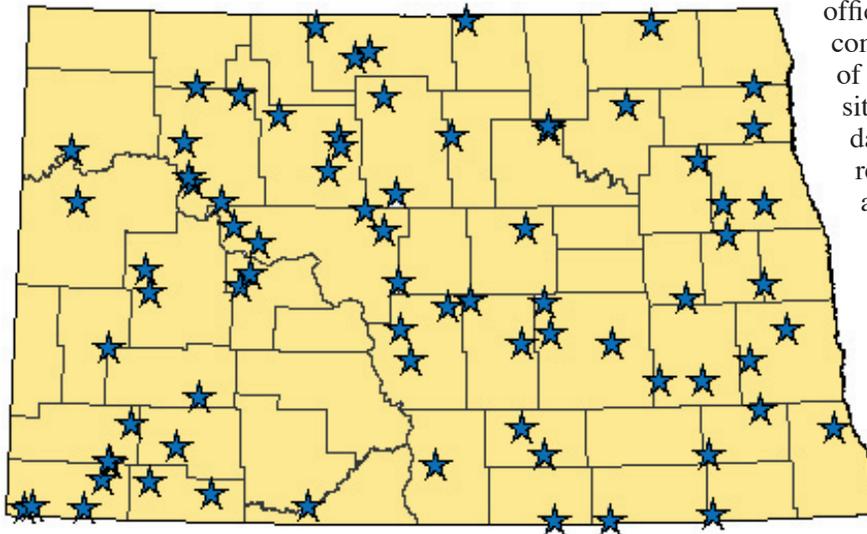
By Daniel Brothers

A very mild winter is nearing the end and spring is approaching rapidly. And with spring comes the time when nearly 750 volunteers from all over North Dakota will put out their rain gauges for another year. These people comprise the Atmospheric Resource Board Cooperative Observer Network (ARBCON), one of the most dense rain gauge networks in the world. Some of these dedicated observers have been reporting rainfall measurements since the inception of the network back in 1977.

Observations are made every morning for the six months between April 1 and September 30. This year ARBCON will be celebrating its 30th anniversary as well as the introduction of a new element to the reporting process. Observers will be given the opportunity to report their rain totals and hail reports via the internet!

In previous years, each observer would enter daily rain totals, as well as hail information, on pre-paid postcards. At the end of each month the postcards would be mailed to the ARB office in Bismarck where someone would enter the data into a computer database. This means that information from the beginning of

May might not be available until the middle of June. With the introduction of internet reporting, rainfall information for a particular day can be available within days of its occur-



2005 ARBCON Internet Observers

rence instead of waiting for a month or more.

While all of our volunteers will continue to report by mail, approximately 80 observers have agreed to report via the internet in addition to mailing the monthly postcards. The postcards will be used both as a major part of the database and as a method of quality control to make sure the information received over the internet is accurate. In addition to this, personnel at the ARB office will compare internet reports with a combined observer/radar-estimated precipitation dataset from the National Weather Service on a daily basis. We hope to expand the number of observers reporting online from

the 11 percent we have in 2006 to 25 percent by 2007.

The information collected by ARBCON is used by many local, state, and federal government offices as well as private companies for a variety of purposes. Universities have used the data for a number of research applications and students at all levels from elementary school through college have used this rainfall data for assorted projects and reports.

Information from the ARBCON database is available on the internet at

www.swc.state.nd.us. Monthly and seasonal rainfall maps from 1977-2005 are available, as well as daily rain and hail data.

You can also contact the ARB office at (701) 328-2788 for information or questions about ARBCON. If you would like to become a volunteer observer or already volunteer and would like to report online, you can call the above number or e-mail us at dabrothers@state.nd.us.

Atmospheric Resource Board
North Dakota State Water Commission
900 East Boulevard, Bismarck, ND 58505
(701) 328-2788
www.swc.state.nd.us

ND Weather Modification Association
PO Box 2599, Bismarck, ND 58502
(701) 223-4232