



August 24, 2007

THE NEBRASKA RAIN NETWORK

The Natural Resource Districts across the state of Nebraska helped to organize a rainfall reporting website called the Nebraska Rain Network. Recorders in Saline County did not have to work very hard this summer. Finally, the 2 inch soaker was good to see.

The volunteers were willing to spend a few minutes recording measurements of precipitation using backyard gauges, which were provided by the local Natural Resources District and a grant from the Nebraska Environmental Trust. The Nebraska Natural Resources Districts, Nebraska Department of Natural Resources and other water-focused organizations, are analyzing the data gathered by the volunteers. The data will provide important daily decision-making information for agriculture, industry, home water use, utility providers, insurance companies, resource managers, and educators.

Coordinator for our area is Scott Theis with the Lower Big Blue NRD in Beatrice. Precipitation reports by volunteers are transmitted via the Internet to the Nebraska Department of Natural Resources each day. Climate analysts process the data and prepare detailed maps showing rainfall patterns. Scientists and water managers study these maps to learn how storms develop and move across the region and to make water-use decisions.

To see where it rained and how much, go to: dnrdata.dnr.ne.gov/NeRAIN on the World Wide Web. On Internet Explorer, you may have to undue your "pop-up" blocker to see the front page. Information is archived and you can see rainfall recordings by NRD district or by county. We finally got a soaker August 23rd and recorders on this website reported rainfall from 1.36 inches in the DeWitt area to 2.33 inches near Friend.

To see Doppler estimated rainfall, an excellent website to look at is: <http://water.weather.gov> Click on the link on the left hand side called "Observed Precipitation." This can give you current information or information that is archived. It is interesting to see the areas in Nebraska that have exceeded 10 inches of rain in August. One of those areas is Richardson County and the Falls City area. The whole county lights up purple indicating greater than 10 inches of rainfall.

SOYBEAN UPDATE

Last week's rain will really help our soybean crop. Many of our soybean fields were at beginning seed fill or half way between beginning seed fill and full seed fill. This is the most important time for soybeans to not be under drought stress. Full seed fill is defined as one pod with full-size green beans (or the seeds fill the pod cavities completely) at one of the four uppermost nodes. At this stage, soybeans require, on average, 3.5 inches of moisture. With a 4 foot irrigation management root zone, when at full capacity, our silty clay loam soils will typically hold that much available moisture for the crop. With the new watermark soil sensors, the readings will be 30 centibars or less when soils are at full capacity or moisture sticks to your hand with the hand probe. Last irrigation on soybeans can be tricky. Over irrigation can decrease yields and not leave



any room for off season precipitation, plus more field compaction at harvest. In contrast, not enough soil moisture at the tail end of the soybean growth cycle will decrease bean seed size.

Randy Pryor, Extension Educator
University of Nebraska-Lincoln Extension in Saline County
306 West 3rd Street, Wilber, NE 68465
Phone (402) 821-2151 • Fax (402) 821-3398 • e-mail: randy.pryor@unl.edu