

INSIDE GRUNDY COUNTY
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Have you wondered why we have had so much flooding recently? The following is what Dr. Elwynn Taylor, ISU Extension Climatologist, had to say about the current weather patterns.

“The 2008 floods have arrived earlier than did the floods of 1993 and in many cases the record high flood levels of 1993 have been surpassed. Also the 2008 event is more wide spread in the Midwest. The 1993 floods became serious in July and continued into August resulting in greatly reduced corn yields in every county of Iowa.

Flooding is more extensive in 2008 than it was by June 10 in 1993. The very wet conditions of 2008 in the Ohio River Valley and southern Missouri were mainly in March and April. The moisture in the north was mainly in May and June of 2008. The extreme moisture of 1993 was mainly in July and August.

The Midwest receives about ten percent more annual precipitation since 1980 than was received before 1970. This increase has effectively doubled the annual stream flow in much of the region. Accordingly, rivers are more often over their banks. In the forty years up to 1970 there were two “high” water years. In the subsequent forty years there were twelve. So an event that might have been expected once every two hundred years in the past would be expected every thirty three years or so under current climate conditions.

The Bermuda High is a consistent and persistent feature of summer. It is the primary force moving moisture into the Midwest and should it fail to develop, wide spread drought is the result. In 2008, an “early arriving” Bermuda High together with a Colorado Low (that has been late migrating to a more typical summer location in Canada) resulted in a much stronger than usual flow of moist air into the Midwest. The Jet Stream associated with the Low system, also not a typical spring resident of the High Plains, provided the necessary impetus for extensive storms to develop.

There has been a gradual migration of the Low toward a more typical summer location in Canada. The extreme cold and snow in the state of Washington and the extreme storms of the Midwest will likely diminish when the Low pressure system diminishes or moves.

Similar conditions existed in 1947, a year with many record high flood reports, followed by severe drought in the Corn Belt. 1983 was also similar with a very wet spring and a harsh dry summer. The chance of changing to drought conditions appears to be about twenty five percent and to the warm and dry side of usual is about sixty two percent.

The sum of factors indicates that 2008 may be an extreme year. The U.S. corn yield is most likely to be 148 bushels per acre and the chance of wide-spread drought remains higher than average at slightly less than one chance in three. However, extremes are likely during the coming years and a somewhat below trend harvest in 2008 is, at this time, expected”.

For more information, contact the Grundy office of ISU Extension at 319-824-6979.