



Iowa scientists: Climate change affecting farming

By David Pitt

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DES MOINES, Iowa (AP) -- More than 150 Iowa professors and climate researchers have signed on to a statement released Friday that says extreme weather patterns caused by climate change are affecting farming, and updated practices are needed to prevent soil erosion and adjust to the new reality.

"Every year, evidence has been building in Iowa and around the world that there are consequences to the continued release of large quantities of heat-trapping gases into the atmosphere," said David Courard-Hauri, chairman of the Environmental Science and Policy Program at Drake University, who helped write the statement.

This year's weather has been extreme.

Iowa started the year under widespread drought that began in 2012, but by spring the rain came in heavy downpours, making it the wettest spring in the 140 years of record-keeping. Some rivers in central Iowa posted record high nitrate levels caused by the influx of fertilizer and manure washing out of fields.

By mid-August, very dry conditions returned, and the state experienced the second-driest July through September ever behind only 1947. Farmers in Iowa and surrounding states found themselves dealing again with varying degrees of drought.

The scientists said at a press conference that farmers should update their practices to avoid further soil erosion and farmland damage.

"Practices that were installed 30 years ago just need to be updated for the current climate we're experiencing with these heavy rains," said Gene Takle, director of the Climate Science Program at Iowa State University, another of the statement's authors.

Takle said the first step is to work with the U.S. Department of Agriculture to agree on new measures. The next step would be to evaluate whether public policy changes are needed to provide incentives for adoption, he said.

He said grass waterways built into farm fields may not be large enough to accommodate heavy water flowing through fields. Farmers may need to increase the area around streams and rivers planted with woody vegetation or perennials that hold soil and slow the escape of fertilizer and manure into waterways.

Farmers also may need to begin using cover crops on a wider scale. Cover crops are grasses planted on farm fields after harvest to hold the soil in place until the next year's crop begins to emerge. The grasses are then killed to allow the crop to flourish.

As with most climate change declarations, there is disagreement about the cause and the severity of impact.

Patrick Michaels, director of the Center for the Study of Science at the Washington-based conservative think tank Cato Institute, said the global climate is constantly changing. He said mankind may have contributed to it since 1975, but he doesn't believe the impact is as severe as the scientists in the paper say.

"Despite what I would call the warming pressure from increased atmospheric carbon dioxide concentration, natural variability has been able to overcome it for decades," he said.

He said the paper is an insult to farmers because it assumes they can't figure out how to adapt.

"It is a tribute to what is known in the environmental sciences profession as the 'dumb farmer scenario,' assuming that they're too stupid to adapt to gradual change," Michaels said. "In fact, farmers adapt to very sudden changes in market value, and every year they make decisions based on that."