

Media Advisory

National Weather Service, Des Moines, IA

August 1, 2010

Introducing the Fire Danger Index Product for Central Iowa

Beginning September 1st, 2010, the National Weather Service in Johnston will be issuing a Fire Danger Index Product. The intent of this product is to alert both the public and local officials to the potential of grass fires across central Iowa.

Recent studies have shown that there is a pronounced increase in wild grassland fires across central Iowa during the months March, April, and early May and again in September and October. It was also shown that days where wild grassland fires occurred were coincident with unusually warm temperatures and high wind (20-30 mph or higher). The primary cause of grassland fires in the spring was determined to be due to the burning of yard litter. In the fall the primary cause were farm implements starting crop stubble on fire and having the embers carried into nearby grasslands. Wild grassland fires can be costly for a number of reasons. Grasses dry out quickly and burn rapidly and spread quickly. The response time for an unexpected grass fire is often longer than it takes for the fire to get completely out of hand. Often additional fire departments are called out to aid in extinguishing the fire and this not only takes time but costs taxpayers a lot of money.

The primary factors in determining the Grassland Fire Danger Index are temperature, humidity, wind and percent of greenness of the fuels that might be burned. As temperature and wind increases and humidity decreases, the risk of grassland fire increases dramatically. The National Weather Service in Johnston,

IA has teamed up with people in the County Conservation department to get greenness data of native grasses in the area. Readings of percent greenness will be taken by a number of County Conservation employees based on a curing guide derived from the index used in Australia. These readings will be used in the calculation of the Grassland Fire Danger Index (GFDI), along with temperature, dewpoint, and wind speed. The index will be categorized to delineate when conditions were high or extreme versus low.

When the GFDI reaches high or extreme levels across any portion of the forecast area for central Iowa, the National Weather Service in Johnston, IA will issue a Grassland Fire Danger Index product within 48 hours of the expected conditions. The intent of this product is to alert the public and local officials of the danger of a wild grassland fire. Citizens should heed this as a warning not to burn yard litter or go into farm fields in times of high wind. Local officials can use this product to aid in determining whether to issue burn permits or perhaps to consider a burn ban. The GFDI product will only be issued when the index reaches high or extreme values and when there is a large percentage of cured fuels, such as early spring and fall. The months that the National Weather Service in Johnston, IA will issue this product is March 1st through May 1st and September 1st through October 31st. We will also issue the product anytime there is a period of drought and conditions warrant. For comments on this product or additional information about this product, the fire danger index or how the index is determined please contact Frank Boksa at Frank.Boksa@noaa.gov.