



Number 285  
February 25, 2011

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#### 1. Brief description of Kansas Flint Hills Smoke Management Plan

During the past year, the Kansas Flint Hills Smoke Management Plan was conceived and written by a sub-committee appointed by the Kansas Department of Health and Environment. It was adopted in December of 2010, and will be implemented for the first time during the 2011 spring burn season.

The plan asks ranchers in a 13-county area within the Flint Hills to voluntarily refrain from burning during periods when weather patterns would likely transport high concentrations of smoke into urban areas. A computer smoke model will project when this is likely to occur, and the results of this model will be made available to ranchers and emergency management personnel daily to assist in making the decision to burn or not burn.

Additional regulatory restrictions apply to non-agricultural burning during the month of April in order to reduce the overall smoke load in the air. This affects the 13 rural counties in the Flint Hills and three urban counties with or near air quality monitoring sites.

While contingency plans exist that will go into effect if voluntary compliance is unsuccessful, it is hoped that the largely voluntary approach to smoke management will provide the desired healthier air and decreased incidences of air quality non-attainment in urban areas.

Reducing air quality concerns associated with prescribed burning is important to avoid additional legislation or regulations that would restrict or eliminate the use of fire. A fire return interval of three years or less in the Flint Hills is desirable to maintain open grassland while reducing or eliminating brush and tree encroachment. Science, management, and legislation must successfully interact to maintain a healthy tallgrass ecosystem in Kansas.

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## 2. Kansas Flint Hills Smoke Management Plan: Burning Liability and Kansas Law

The following is a slightly edited transcript of one in a series of K-State's Agriculture Today radio broadcasts on the Kansas Flint Hills Smoke Management Plan. This is an interview with Roger McEowen, Leonard Dolezal Professor in Agricultural Law and Director of the Center for Agricultural Law and Taxation at Iowa State University, and former K-State Extension Ag Law Specialist, conducted by Eric Atkinson of the K-State Radio Network. Podcasts of all Agriculture Today interviews on the Flint Hills Smoke Management Plan can be found at: <http://ksfire.org/p.aspx?tabid=21>

Q: As a rule, open burning in Kansas is governed fairly tightly. But farmers and ranchers are given some latitude when it comes to modified agricultural burning, such as pasture burning. Could you expand on that?

A: Open burning for the purpose of crop, range, pasture, wildlife, or watershed management is permissible in accordance with the rules. In dealing with grass, woody species, crop residue, or dry plant growth for the purpose of cropland or rangeland management, this is exempt from the prohibition on open burning. But you have to meet certain conditions.

Here's what you need to do. If you're conducting the burn, you have to notify the local fire control authority within your jurisdiction before the burning begins. That's the rule unless the appropriate local governing body has a policy that notification is not required. There is some overlap in state rules and local rules. I don't know of any local areas where notification is not required, and it makes common sense to go ahead and notify people anyway. If the fire gets out of control, which can occur sometimes through no fault of the person conducting the burn, it's best if you've already notified people in advance of when and where you're going to conduct the burn so they can get to you quickly to help you out. So in addition to being required by regulations, it just makes a whole lot of sense to notify local authorities.

Secondly, you can't conduct a burn that will create a traffic safety hazard. Obviously, a lot of that depends on where you're located. Some pasture burns are located a long way from roadways, and are not going to be a problem. But if you're burning in the Flint Hills along the Kansas Turnpike, then yes, you'd better notify the local authorities. Don't conduct a burn if it's going to create a traffic hazard. If there are conditions that might result in smoke blowing toward a public roadway, then you have to give adequate notification to the Highway Patrol, sheriff's office, or some other appropriate state or local traffic authority before you burn. That's a good idea in any event because sometimes the wind will shift direction after you get the burn started, or maybe it'll outrun the backfire that you're set. So it's always good to notify local authorities first. The rules say you can't create a traffic hazard. You can be cited or fined for creating a safety hazard.

Q: Are there stipulations for situations where a fire escapes? Let's say a fire jumps a firebreak, or a sudden gust of wind and kicks embers into an unintended area.

A: The state regulations state that the person conducting the burn is supposed to supervise the burn until the fire is extinguished. Sometimes a fire will get out of control even after you think you've got it out then it restarts somehow. There have been some Kansas cases on this. There was one about 15 years ago in south central Kansas. It wasn't actually a pasture burn that was being conducted. But there were some ranch hands that were feeding cattle and there were some

smoldering hay piles. They thought they had the fire put out. They went away, the wind whipped up, the fire got started again, and it created a massive burn in south central and southwest Kansas. Kansas courts have ruled that these cases are not to be determined on a strict liability basis. Instead, they are determined based on whether reasonable care was exercised under all the circumstances. That's a key point. The more you are able to take common sense steps to contain a burn so it won't damage someone else -- such as burning when weather conditions are favorable -- the better. If wind conditions are favorable then they subsequently change and become beyond your control, then the questions are: Did you take the extra steps to notify authorities in advance that you were conducting the burn? Did you have adequate water supplies available? Did you have adequate help available? Did you notify the state patrol that roadways might be obscured by smoke? Those all go to the issue of whether you may potentially be found liable.

Basically, the standard negligence principles apply. That is: duty, breach, causation, and damages. Do I have a duty, did I breach the duty, and did the breach of the duty cause damages to someone else? The duty in these situations is to use reasonable care in conducting the burn. It is not a strict liability situation, which would mean that if a fire gets out of control and causes damage to someone else, you would automatically be liable. That's not the rule in Kansas. Agricultural producers can be thankful that's not the rule.

Q: That can apply as well to smoke management. You mentioned not putting smoke over a roadway. But in a very broad sense, this duty of care and common sense practicality can fit in here, too, correct?

A: That's right. There are specific rules with respect to wind speed, when you can and can't burn with respect to weather conditions, how close you can burn to an occupied dwelling unless you notify the occupant of the dwelling before you burn. There are all sorts of rules -- distance rules, air speed rules, fog issues, making sure you're not creating a safety hazard for airplanes trying to take off or land -- there are a very comprehensive set of regulations that have been developed to try to set the ground rules for allowing prescribed burning by agricultural producers while not creating problems for other people. And that's where the rub is. The rules try to give us the framework so we can do this. It's a good management practice for cattle operations, but we need to do it in a way that doesn't disturb the rights of other people. That's what the rules are trying to address.

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### 3. Two new soybean production webcasts

Focus on Soybean, a project of the Plant Management Network, has launched two new webcasts. Both webcasts are applicable nationally, and they will be publicly available through April 30, 2011. The two webcasts are:

\* ***Understanding Soybean Yield and Keys to Entering the 100-Bushel Soybean Club***, by Bill Wiebold, Soybean Extension Specialist at the University of Missouri.. This webcast will help consultants, growers, and other practitioners throughout the United States better understand yield and what it takes to

reach the 100-bushel threshold for soybean yield. Part one of the presentation discusses soybean yield and how factors during the plant's life cycle influence yield. Part two describes six keys to increasing soybean yield. By the end of the presentation, practitioners will better understand how soybean plants produce yield and will be able to use that understanding to develop cropping systems that enhance profitable soybean production. View this presentation at <http://www.plantmanagementnetwork.org/edcenter/seminars/100BushelClub/>

\* ***Performance of First and Second Generation Roundup Ready Soybean Varieties***, by Shaun Casteel, Soybean Extension Specialist at Purdue. This webcast offers yield comparisons between RR1 and RR2 varieties using data from various Midwestern states, but the principles for comparing the technologies is appropriate for growers, consultants, and other crop professionals in all states. The effects of geography, maturity group, and seed treatments are discussed for improved decisions in variety selection. View this presentation at <http://www.plantmanagementnetwork.org/edcenter/seminars/RR1vRR2/>

Focus on Soybean is a publication of the Plant Management Network ([www.plantmanagementnetwork.org](http://www.plantmanagementnetwork.org)), a nonprofit online publisher whose mission is to enhance the health, management, and production of agricultural and horticultural crops. It achieves this mission through its applied, science-based resources, like Focus on Soybean. PMN is jointly managed by the American Society of Agronomy, American Phytopathological Society, and Crop Science Society of America.

View other Focus on Soybean presentations at [www.plantmanagementnetwork.org/fos](http://www.plantmanagementnetwork.org/fos).

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#### 4. Comparative Vegetation Condition Report: February 8 – 21

K-State's Ecology and Agriculture Spatial Analysis Laboratory (EASAL) produces weekly Vegetation Condition Report maps. These maps can be a valuable tool for making crop selection and marketing decisions.

Two short videos of Dr. Kevin Price explaining the development of these maps can be viewed on YouTube at:

<http://www.youtube.com/watch?v=CRP3Y5NIggw>

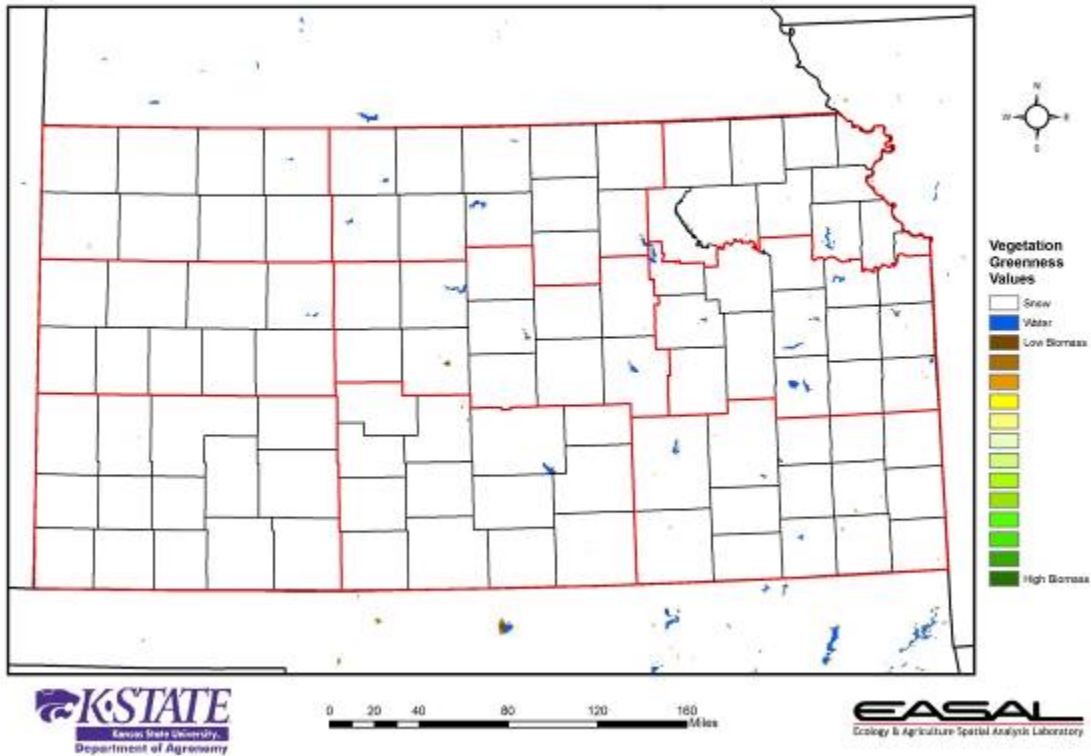
<http://www.youtube.com/watch?v=tUdOK94efxc>

The objective of these reports is to provide users with a means of assessing the relative condition of crops and grassland. The maps can be used to assess current plant growth rates, as well as comparisons to the previous year and relative to the 21-year average. The report is used by individual farmers and ranchers, the commodities market, and political leaders for assessing factors such as production potential and drought impact across their state.

The maps below show the current vegetation conditions in Kansas, the Corn Belt, and the continental U.S, with comments from Mary Knapp, state climatologist:

# Kansas Vegetation Condition

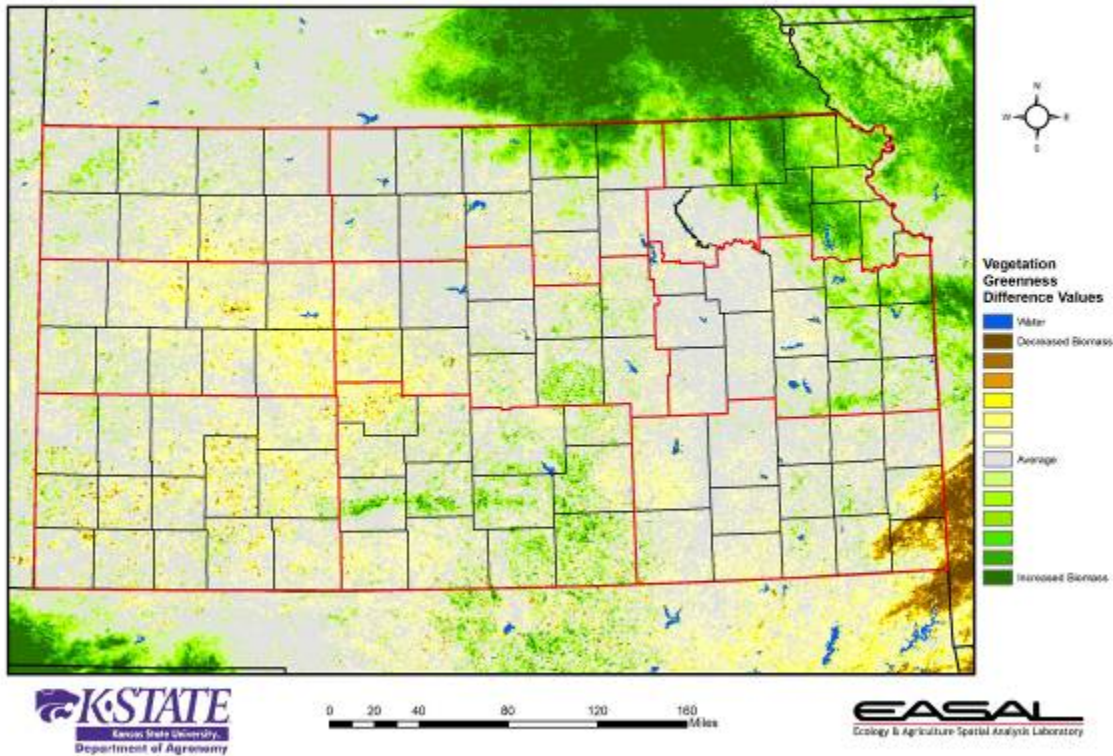
Period 08: 02/08/2011 - 02/21/2011



**Map 1. The Vegetation Condition Report for Kansas for February 8 – 21 from K-State’s Ecology and Agriculture Spatial Analysis Laboratory shows that snow was again a feature over the two-week period. The end of the period saw major melting, with most of the snow gone by Feb. 21.**

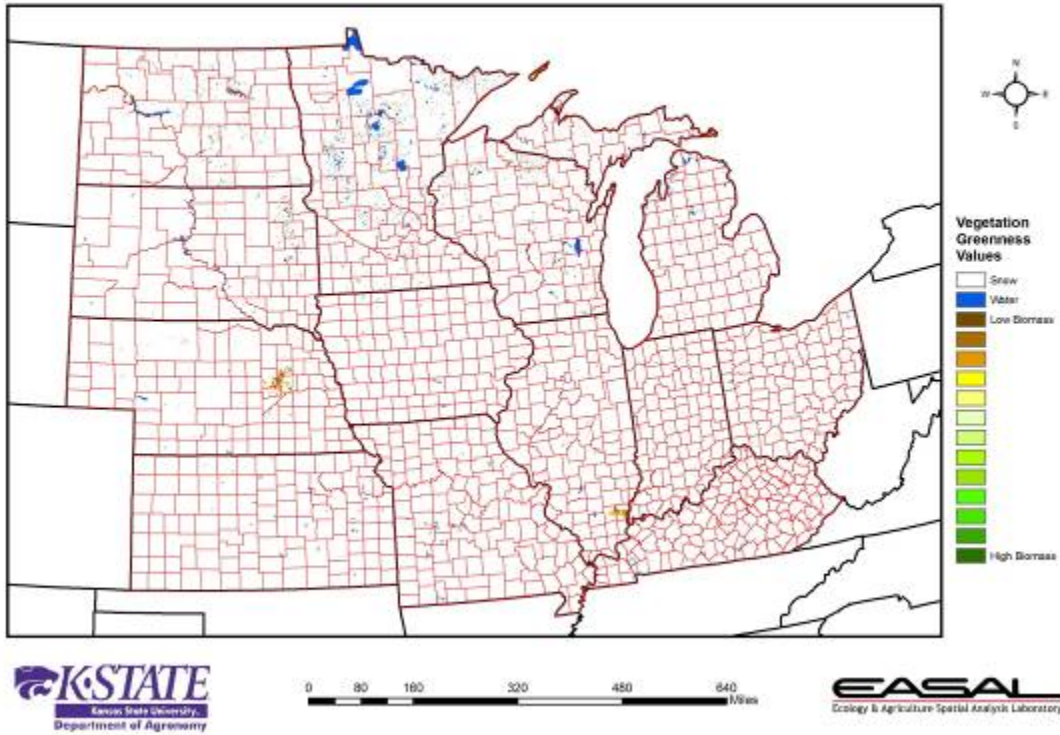


Kansas Vegetation Condition Comparison  
Mid-February 2011 compared to the Mid-February 2010



**Map 2. Compared to last year at this time, this year's Vegetation Condition Report for February 8 – 21 from K-State's Ecology and Agriculture Spatial Analysis Laboratory shows an increase in photosynthetically active biomass in various areas. In south central Kansas, the increase is in part because more wheat was successfully planted this season than last season. The dry conditions in west central and southwest Kansas can be noted by less photosynthetic activity this year.**

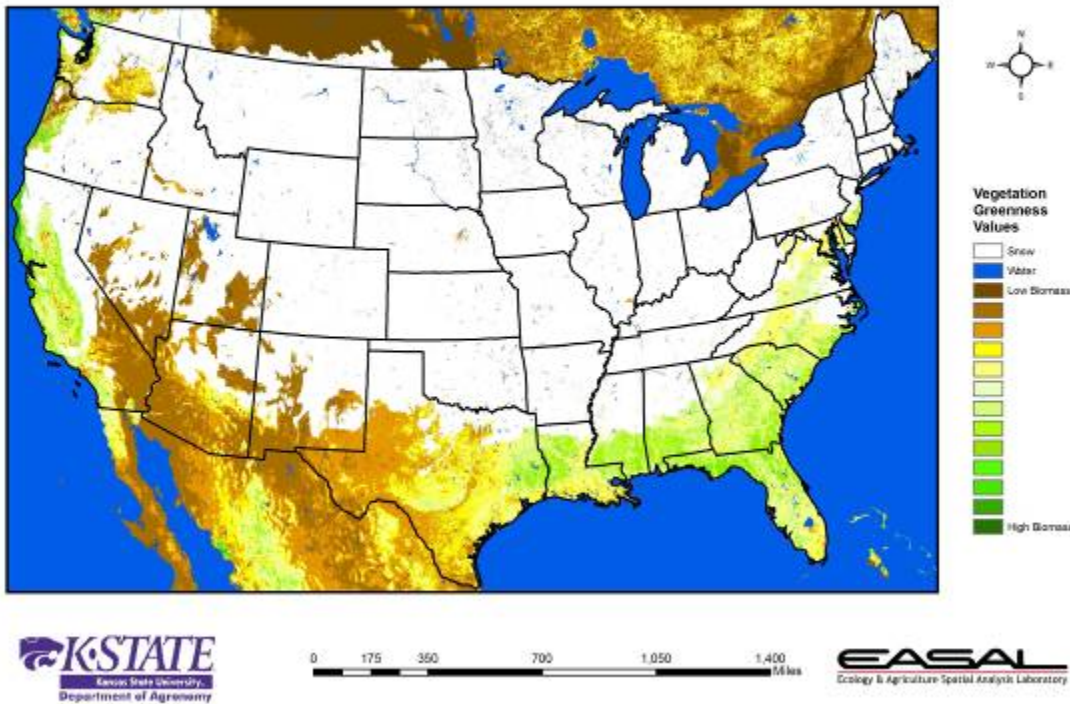
U.S. Corn Belt Vegetation Condition  
Period 08: 02/08/2011 - 02/21/2011



Map 3. The Vegetation Condition Report for the Corn Belt for February 8 – 21 from K-State’s Ecology and Agriculture Spatial Analysis Laboratory shows that much of the Corn Belt continues to feature winter conditions. The greater-than-average snowpack brings increased concern for spring floods

## Conterminous U.S. Vegetation Condition

Period 08: 02/08/2011 - 02/21/2011



**Map 4. The Vegetation Condition Report for the U.S. for February 8 – 21 from K-State’s Ecology and Agriculture Spatial Analysis Laboratory shows vegetative greenness continues to increase, particularly from southeast Texas toward the Carolinas. However, much of this area has seen below-average precipitation for the month to date.**

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These e-Updates are a regular weekly item from K-State Extension Agronomy and Steve Watson, Agronomy e-Update Editor. All of the Research and Extension faculty in Agronomy will be involved as sources from time to time. If you have any questions or suggestions for topics you'd like to have us address in this weekly update, contact Steve Watson, 785-532-7105 [swatson@ksu.edu](mailto:swatson@ksu.edu), or Jim Shroyer, Research and Extension Crop Production Specialist and State Extension Agronomy Leader 785-532-0397 [jshroyer@ksu.edu](mailto:jshroyer@ksu.edu)