11/4/03 DRAFT

Fire Regime Condition Class (FRCC) Interagency Handbook Reference Conditions

Modeler: Wendel Hann Date: 10/24/03 PNVG Code: PGRA5

Potential Natural Vegetation Group: Southern Plains Grassland With Trees

Geographic Area: Occurs in the southern Great Plains from southeastern Colorado east through Kansas and south through Oklahoma, eastern New Mexico and west Texas.

Description: This type typically occurs on the north aspects, in draws, on ridges or in higher precipitation areas of the rolling uplands of the Great Plains. Vegetation is mid and short grass dominated little bluestem, blue grama, buffalo grass, and needle-and-thread, with intermingled forbs and scattered patches of trees and shrubs. This type correlates with Kuchler's (1964) types 65 and 69.

Fire Regime Description: Fire regime group II, frequent replacement. The mean fire interval is about 10 years with high variation due to year to year variation in grass production related to drought and moisture cycles. Grazing of the grassy fuels by large ungulates increases the variaton of the fire interval.

Class	Percent of	Description
	Landscape	
A: post replacement	5	Dominated by resprouts and seedlings of grasses and
		post-fire associated forbs. Low to medium height with
		variable canopy cover. This type typically occurs where
B: mid-development closed	20	fires burn relatively hot in classes B and C. Greater than 35 percent herb cover. Generally
D. miu-development closed	20	associated with more productive soils, but can be
		caused by cumulative high moisture seasons increasing
		the cover and productivity of class C. Low to medium
•		height.
C: mid- open	70	Less than 35 percent herb cover. Generally associated with less productive cobbly and gravelly soils, but can
		also be caused by cumulative drought shifting class B to
		this class. Low to medium height.
D: late- open	4	Less than 35 percent tree cover. Savannah aspect of
		scattered trees and shrubs with grass. Typically located
		on gentle slopes or less productive soils where fire
E: late- closed	1	intensity allows scattered tree seedlings to survive. Greater than 35 percent tree cover. Typically located on
	1	the ridges, more moist north aspects, or other areas
		where patches may be missed by fire.
Total	100	

Vegetation Type and Structure of Fire Regime Group II

Fire Frequency and Severity						
Fire Frequency-	Modeled	Percent,	Description			
Severity	Probability	All Fires				
Replacement Fire	.083	85	Replacement fires in A, B and C			
Non-Replacement Fire	.017	15	Mosaic fires in classes B and C			

All Fire Frequency*	.100	100	10 year mean fire frequency with high variation due to complex interaction of drought cycles, herbivory, and Native American Burning
*Sum of replacement fire and per repla	acmont fire probabilit	tion	

*Sum of replacement fire and non-replacement fire probabilities.

References

Brown, James K.; Smith, Jane Kapler, eds. 2000. Wildland fire in ecosystems: effects of fire on flora. Gen. Tech. Rep. RMRS-GTR-42-vol. 2. Ogden, UT: U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station. 257 p.

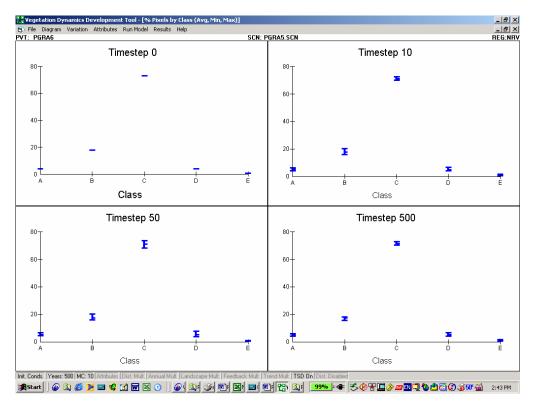
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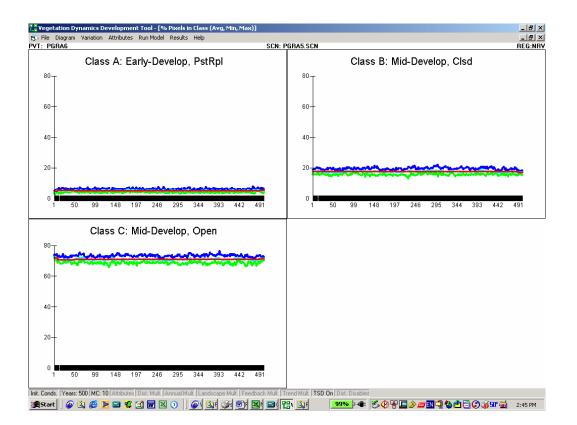
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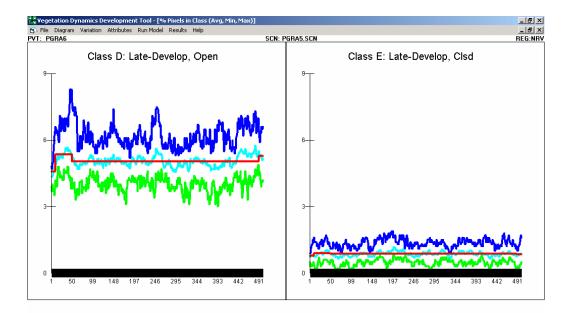
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MODELER FIELD REVIEWS: Wendel Hann – Colorado 2003, New Mexico 2003, Texas 2001

VDDT Results:







Init. Conds. | Years: 500 | MC: 10 | Attributes | Dist. Mult, | Annual Mult, | Landscape Mult, | Feedback Mult, | Trend Mult, | TSD On | Dist. Disabled | #Start |] @ Q, @ D = @ @ I III No. |] @ Q; @ M = Q = Mult, | Start |] @ Q; @ M = Q = Mult, | Start |] @ Q

