

# *Appendix K*

## **Southern Pine Beetle Hazard Rating**

### **Coastal Plains System**

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### Southern Pine Beetle Hazard Rating Coastal Plains System

The primary factors related to Southern Pine Beetle Hazard include tree vigor and tree age. However, studies indicate that these hazard factors are strongly correlated to average tree height and stand density, which are easily measured. Therefore, models developed through research to assist foresters in determining which stands are more at risk are based on the stand basal area and height. This following table gives ratings of where outbreaks are most likely to occur, which will produce the most beetles, and cause the most losses if and when a southern pine beetle outbreak occurs in the next three to five years. (The Integrated Pest Management Decision Key for National Forests in Region 8, circa 1990)

#### Southern Pine Beetle Hazard Rating for Each Stand in “Proposed Action”\*

Compartment	Stand	Average Stand Total Height	Current Basal Area	Hazard Rating
277	3	40	74	Low
277	5	86	129	High
277	6	92	148	High
277	7	94	110	High
277	8	33	86	Low
277	9	88	119	High
277	10	118	120	High
277	21	59	82	Medium
277	22	56	104	Medium
277	28	88	119	High
279	11	90	214	High
279	12	37	130	Low
279	14	100	162	High
279	38	90	214	High
280	3	70	110	High
280	6	90	130	High
280	7	70	150	High
280	22	70	125	High

\*Taken from classifications developed for National Forests in the Coastal Plain.

Stand Classifications for southern pine beetle losses for National Forests in the Coastal Plain were developed through the cooperation of the Southern Forest Experiment Station and Forest Pest Management. Because it cannot be predicted exactly when and where infestations are most likely to occur, the following classifications are intended to identify those stands in which infestations are most likely to occur, cause significant losses, and produce the most beetles--if and when an outbreak develops--over the next three to five years.

- A. Stands with forest type loblolly pine, shortleaf pine, loblolly pine-hardwood, or shortleaf pine-oak will have a high or medium hazard classification according to total stand height and pine basal area as follows:

<u>Total Height</u>	<u>High Hazard</u> -----Pine Basal Area-----	<u>Medium Hazard</u> -----Pine Basal Area-----
56-65		>80
66-75	>90	80-90
76-105	>90	70-90
106+	>100	70-100

- B. Stands with forest type slash pine, longleaf pine, or bottomland hardwood-pine will have a medium hazard classification according to total stand height and pine basal area as follows:

<u>Total Height</u>	<u>High Hazard</u> -----Pine Basal Area-----	<u>Medium Hazard</u> -----Pine Basal Area-----
66-75	**	>80
76-105	**	>90
106+	**	>100