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KANSAS FORESTRY TECHNICAL NOTE KS-11

SUBJECT: ECS – Windbreak Condition

Purpose. To provide guidance for windbreak condition

Effective Date. Effective upon receipt

Windbreaks in Kansas have a long history of protecting our soil resources, controlling snow deposition, reducing wind velocities, conserving fuel, beautification, livestock protection, and providing habitat for wildlife. Many of these windbreaks are beginning to or have deteriorated to a level that their functionality is compromised. The purpose of this technical note is to provide a basis for determining windbreak condition.

Windbreak condition

Good – At least seven of the attributes describe the windbreak; (one includes less than 25 percent of the trees are dead.)

Fair – At least five of the attributes describe the windbreak; (one includes less than 25 percent of the trees are dead.)

Poor – At least four of the attributes describe the windbreak and/or more than 25 percent tree mortality.)

Windbreak attributes

- Less than 25 percent of the trees are dead.
- Continuous barrier; no gaps (missing trees.) Windbreaks should be observed from 1/8 of a mile (660 feet) distance to determine gaps. Walk or drive the entire windbreak for a good assessment.
- 50 percent density or greater.



Windbreaks with approximately 50 percent density

(more)

DIST: E

- No smooth brome grass or fescue sod within the windbreak.
- Majority of the tree crowns are healthy with less than 25 percent of the trees showing storm, insect, disease, or herbicide damage.
- No livestock activity in the windbreak.
- Tree regeneration is present.
- Windbreak will live and function another 20 years for its intended purpose. Take into consideration age of windbreak, type of trees and their average lifespan, tree condition, and windbreak management.

References

Read, Ralph A., The Great Plains Shelterbelt in 1954, Rocky Mountain Forest and Range Experiment Station, United States Forest Service, Great Plains Agricultural Council Publication No. 16, 125pp

Photo Credits

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(signed)

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