



Tech Note

Edge Feathering of Woodland Borders Benefits Wildlife

By Kyle Johnson, Private Lands Biologist



The borders or edges between a forest and grassland or forest and agricultural field have incredible potential for wildlife. But this doesn't just apply to

large forest areas. The borders of tree rows and smaller woodland patches also have almost endless habitat potential as well. For land managers looking to enhance wildlife habitat, edge feathering is an option that can benefit white-tailed deer, wild turkey, northern bobwhite and numerous nongame species.

The value of edge habitat for wildlife has been advocated for many years, but these transitions between two habitat types are not always suitable for quail and other species. All too often, the borders that exist between grasslands and woodlands or croplands and woodlands are abrupt and lack the diversity required to attract and hold wildlife. In most natural situations, the transition from one habitat type to another is gradual and contains a diverse mix of both habitat types. The



When croplands abruptly meet forested areas, habitat for quail and other wildlife is minimal. Woodland borders like this can be greatly enhanced through edge feathering practices.

edge width, as well as the mixture and height of plants, play a large part in whether the edge is wildlife-friendly or not. Edges with a natural transition can often be 150-foot wide or more with a subtle change from grasses and weeds to shrubs to short trees and eventually mature timber. Abrupt forest edges, whether adjacent to grassland or cropland, can still be attractive to many species, but a well-feathered edge can provide year-round use and even be a focal point in a species' home range.

Several edge feathering techniques are available. Extensive areas of forest can be thinned at varying levels to create a soft, feathered habitat transition. For example, the outer portion of the forest immediately adjacent to the grassland or cropland can be aggressively thinned with at least 75 percent of the trees removed. The thinning gradually decreases to 50 percent and 25 percent as the unthinned forest is reached. If each thinning zone is 50 feet wide, the total edge habitat created would be 150 feet.

Edge Feathering by Thinning

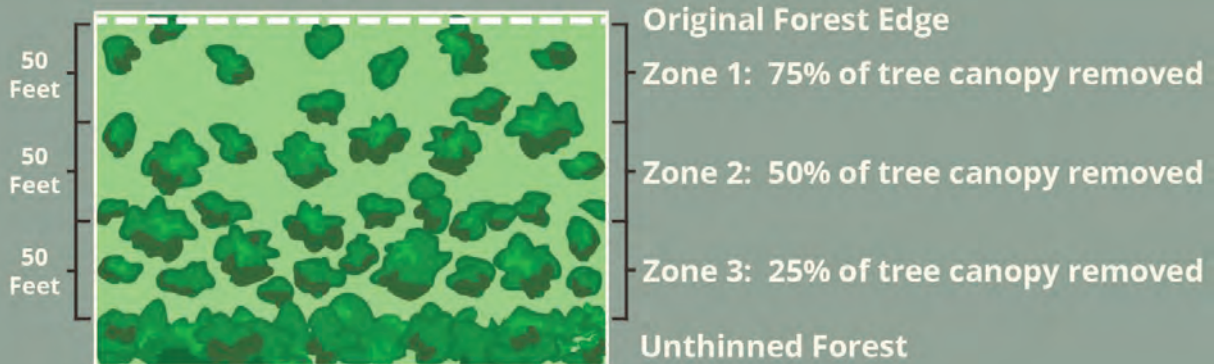


Figure adapted from Kentucky Department of Fish and Wildlife Resources

For properties with small patches of timber or narrow tree rows, a combination of natural revegetation and planting may be best suited to enhance the edge. Grasses and forbs could dominate the outer portion, with shrubs planted within the interior and short-stature trees adjacent to the mature timber.

Species such as blackberry, sand plum, sumac, and dogwood are excellent for the shrub zone while Osage orange, persimmon, redbud, gum bully, and chokecherry are great for planting adjacent to the mature timber. Although the edge width can vary, feathered edges which are too narrow may have little

impact on quail and other species. As a result, edges of at least 50 feet wide are recommended and larger is better.

Edge Feathering by Planting

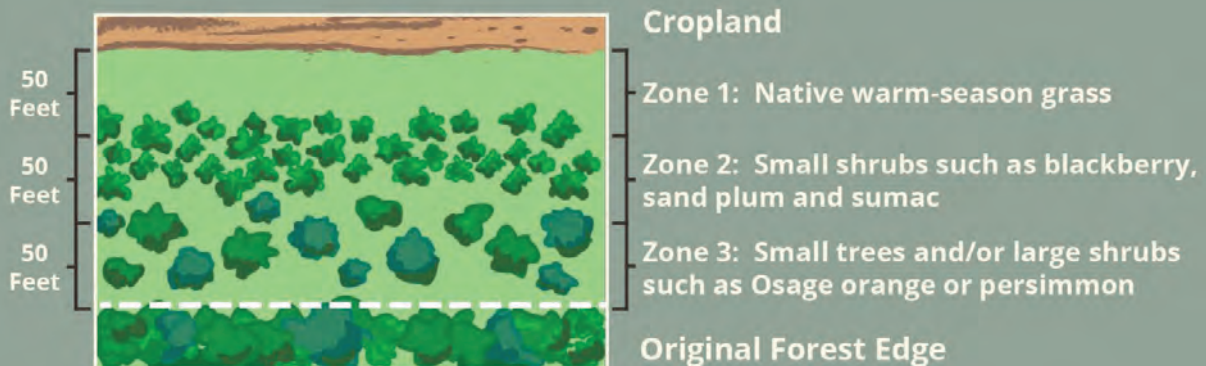


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