

Implications for Wildlife Overview

Timber management practices which alter the existing vegetation, may have associated effects on wildlife species. However, the proposed thinning will have only minor changes on the forest structure and the wildlife that inhabits the area, some of which will be beneficial. It is the opinion of this author that no wildlife that inhabits the area will be negatively affected overall. However, wildlife responses to the prescribed thinning will depend on the species (Table 1).

Whitetail deer

These animals are abundant throughout the area. Deer require hard mast (oak nuts) for food, especially during the winter months. Beech trees are a relatively minor component of the tree species, but provide an important mast on the area. Timber cutting will remove some other mast trees, but enough will be left to provide a food source for these animals. It should be noted that deer typically have a home range of 1 square mile, which would include lands adjacent to as well as the nature center property; thus they are not dependant on the nature center tract for all their needs.

Gray squirrels

Tree squirrels, including gray squirrels are abundant on the nature center. Den or wolf trees should be left standing to provide shelter. Gray squirrels, flying squirrels, and raccoons all utilize den trees throughout the year. Squirrels also require

hard mast, including hickory and beech nuts during the fall and winter. Their needs are very similar to that of deer in this respect, and the prescribed thinning would probably have little effect on overall populations of both animals.

Ruffed grouse

Grouse are generally sparse in a forest of this age, with little cover near the ground to offer protection. Thinning the tract will provide better habitat for them. If possible, aspen trees should be left intact as their catkins provide critical food during the spring months.

Songbirds

It is estimated that 25-35 breeding species inhabit this stand during the summer months. The light thinning as prescribed, will not cause any species to disappear. It should be noted however, we do not have information regarding rare species possibly found on the nature center. Some of these species may require large tracts of mature forest. Species associated with early successional habitats, such as shrubby areas with little overstory, may increase as a result of the thinning, especially where gypsy moth mortality is high. The thinning will improve vertical structure resulting in potential nesting substrates for more species of songbirds. However, most species will maintain similar populations before and after cutting, as the thinning will not significantly alter the overall forest structure.

The mixed oak stands have heavy advance regeneration taking


place as the result of gypsy moth mortality. Removal of some of these dead trees is warranted as they are a liability regarding the safety of visitors from windfall, blowdowns, etc. Leaving 2-3 dead trees per acre in some areas will provide habitat for many bark foraging songbirds such as woodpeckers and nuthatches which feed on insects associated with dying timber. Trees selected to be left standing should be at least 100' away from established trails to minimize chances of injury to visitors, in the event of windfall.

Skid trails and landing sights

Skid trails and landing sights will increase the amount of edge habitat on the area. These areas will be seeded with vegetation. This is beneficial for two reasons: 1) it can provide plants that wildlife eat for food and 2) they provide stability to minimize erosion caused by disturbing the topsoil, during the skidding process.

Overall, wildlife species will show little or no response to the prescribed timber removal. A 20-30% thinning of this area is compatible with any goals of maintaining populations for wildlife viewing and enjoyment by visitors.

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M.S. Wildlife Management

Table 1. List of wildlife species potentially present and their response to prescribed thinning on White's Woods Nature Center, Indiana, PA.

Species	Response
Mammals	
Cottontail Rabbit	none overall - slash left on the ground and piled would provide important cover
Raccoon	none overall
Opossum	none
Striped Skunk	none
Red Fox	none
Gray Squirrel	little effect
Whitetail Deer	little effect - increase in shrubby vegetation may provide additional browse food and cover
Birds	
Wild Turkey	little effect if some mast trees are left intact - similar requirements as deer and squirrel for hard mast
Ruffed Grouse	opening up the forest would improve habitat
Songbirds (25-35 spp.)	generally species-specific response little change overall
* woodpeckers	leaving 2-3 dead oak would provide foraging habitat
* shrub species ^a	provides nesting and foraging cover
* mature forest ^b	little effect overall

^a shrub species include birds typically associated with early successional habitats (e.g. brushy fields, heavy understory development).

^b mature forest species include birds that require mature forest for nesting season.