

# Missouri

## Forest Community WHAG Model

### Instructions

This model is intended to evaluate the quality of wildlife habitat on existing forested land or land to be re-forested, excluding riparian areas. Use riparian, prairie/grassland, savanna, or glade models for those natural communities.

#### 1. Forest Composition

- a. 10 point category is based on a good mix of hard and soft mast producing species
- b. 6 point category is based on a situation where the forest is dominated by a far less diverse mix of trees, often lacking soft-mast species. Key is that there is less than 10 square feet of basal area per acre of overstory tree species that are not oaks or hickories (excluding pecan).
- c. 4 point category is often described as “early successional” in nature but is not limited to that definition. May have been produced by severe high-grading or selective cutting which removed the hard mast producing species of trees.
- d. 1 point category is for new plantings that lack diversity. New diverse plantings may score higher.

#### 2. Proximity to a Dependable Water Source

- a. Score points based on the majority of the stand. For example, in a 500 acre tract of forest, if more than 50% of the 40 acre blocks have water sources, score 5 points. “Dependable” is defined as having water present throughout the growing season in all but bad drought years.
- b. In large tracts, if there are four water sources per square mile section evenly distributed more or less, score 3 points.
- c. “Generally Unavailable” means that there are few water sources in the landscape. This can be common in the upper ends of forested watersheds where no artificial supplies exist and headwater streams are intermittent in nature.

#### 3. Forest Structure

- a. The overstory is formed by the dominant tree crowns. Midstory trees don’t reach the canopy layer of the dominant trees. Shrubs are woody non-tree species 3-20’ tall. The herbaceous layer is present and abundant.
- b. 0 point category may result from a closed canopy or a heavy midstory of maples, for example.

#### 4. Permanent Forest Openings and Edge Habitat

- a. The best forest habitats are either large blocks of forest with forest openings OR smaller blocks of forest surrounded by wildlife friendly open ground, with a good brushy edge separating them.

- b. “Wildlife friendly” open ground includes glades, savannas, cropland, or grasslands containing 60% or more species rated good or excellent, with no more than 25% poor species, from Table 1 of the 327 spec.

**5. Forest Age/Size Class Diversity**

- a. A diverse mix of sizes or ages of trees is best for wildlife.
- b. 10 point category is for uneven-aged stands containing all five size/age classes of trees within it, OR an even-aged forest containing stands of each of the five size/age classes, each at least 5% of the total forest acres.

**6. Grazing Pressure**

- a. **Forest grazing trumps all other scoring categories. Grazed forest cannot reach 0.5 WHAG score.**

**7. Number of Snags or Den Trees Per Acre**

- a. Snags are defined as dead standing trees. Den trees are live standing trees with cavities suitable for nesting wildlife. The number of snags can be increased by killing standing trees by girdling and/or herbicide.