

These guidelines are designed to encourage protection of soils, wildlife habitat, water, and other forest attributes when biomass or other forest products are harvested in the Northeastern United States. These guidelines primarily pertain to issues of sustaining ecological function and productivity; they are not meant to replace a comprehensive assessment of forest sustainability.

This reference sheet is only a summary please see the full document at:

[www.forestguild.org/publications/research/2010/FG\\_guidelines\\_NE.pdf](http://www.forestguild.org/publications/research/2010/FG_guidelines_NE.pdf)

The guidelines draw from two other documents:

**Ecology of Deadwood in the Northeast**

[www.forestguild.org/publications/research/2010/ecology\\_of\\_deadwood.pdf](http://www.forestguild.org/publications/research/2010/ecology_of_deadwood.pdf)

**An Assessment of Biomass Harvesting Guidelines**

[www.forestguild.org/publications/research/2009/biomass\\_guidelines.pdf](http://www.forestguild.org/publications/research/2009/biomass_guidelines.pdf)

***Follow Existing BMPs***

These guidelines are designed to add to existing best management practices (BMPs).

Involve a professional forester in development of a long-term management plan and supervision of harvests.

***General Guidelines for Retaining Forest Structures***

STRUCTURE	MINIMUM TARGET (per acre)		CONSIDERATIONS
	Number	Basal area (ft <sup>2</sup> )	
Live decaying trees >12 - 18 inches DBH	4	3-7	Where suitable trees for retention in these size classes are not present or may not reach these targets due to species or site conditions, leave the largest trees possible that will contribute toward these targets.
Live decaying trees >18 inches DBH	1	2	
Snags >10 inches DBH	5	3	Worker safety is top priority. Retain as many standing snags as possible, but if individual snags must be felled for safety reasons, leave them on the forest floor.

If these forest structures do not currently exist, select and identify live trees to become these structures in the future. Retaining live decaying trees helps ensure sufficient snags in the future.

Since there are differences in decay rates and wildlife utilization, retain a variety of tree species as snags, DWM, and large downed logs.

In areas under even-aged management, leave an uncut patch within or adjacent to every 10 acres of regeneration harvest. Uncut patches, including riparian buffers or other set-asides within the management unit, should total 5% to 15% of the harvest area.



## ***Guidelines for DWM Retention***

In general, when 1/3 of the basal area is being removed on a 15 to 20 year cycle, retain 1/4 to 1/3 of the slash, tops, and limbs from harvest (i.e., DWM).

If harvests leave more trees on site, are less frequent, or the harvest is on a nutrient-rich site less slash, tops, and limbs from harvests are required to protect site productivity.

If harvests leave fewer trees on site, are more frequent, or the harvest is on a nutrient-poor site MORE slash, tops, and limbs from harvests should be left on-site.

In general, leave DWM distributed across the harvest site. However, there may be cases where piles of DWM provide habitat, or redistribution of DWM collected at the landing would cause excessive damage to soil or regeneration.

Minimize the removal of needles and/or leaves by harvesting in winter, retaining FWM on-site, or leaving felled trees on-site to allow for needle drop.



### ***Definitions***

We use biomass harvesting to refer to the removal of logging slash, small-diameter trees, tops, or limbs.

DWM is downed woody material: downed logs, tops, branches, or slash.



### ***Protect Rare Forests and Species***

Harvests in critically imperiled or imperiled forest types should be avoided unless necessary to perpetuate the type.

Biomass harvesting may be appropriate in sensitive sites to control invasive species, enhance critical biodiversity habitat, or reduce wildfire risk.

Old growth forests should generally be protected from harvesting.

# ***FOREST BIOMASS RETENTION AND HARVESTING GUIDELINES FOR THE NORTHEAST***

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